



## Full Line Catalog

**Trusted Brands. Trusted Tools.®**

LOCKING TOOLS

QUICK CLAMPING TOOLS

VICES, CLAMPS,

PIPE TOOLS,

PLANES AND

BOLT CUTTERS

CHISELS

SNIPS

HEX TOOLS

MARKING TOOLS

HAND SAWS

SAW BLADES

QUICK CHANGE TOOLS

WOOD BORING TOOLS

ROUTER BITS

DRILL BITS

TAPS, DIES, AND

SCREW EXTRACTORS

STEP DRILLS AND

CARBIDE HOLE CUTTERS

MASONRY TOOLS

AND TILE CUTTERS

FASTENER DRIVE TOOLS

ACCESSORIES





Welcome to American Tool Companies' product catalog. As you will see, it reflects many recent additions to our growing range of premium hand tools, cutting tools, power tool accessories, and related products.

Founded in 1924 by William Petersen, a blacksmith from Denmark, our company began as a small, one-product manufacturing operation in the Nebraska farmlands. Over the years, American Tool Companies has grown to become a global leader in the hardware/home improvement industry by aggressively expanding our lines of brand-name tools. Our brands have become synonymous with ingenuity, craftsmanship and performance.

Today, with more than twenty manufacturing facilities in North America, South America, Europe, and New Zealand, supported by worldwide sales and distribution facilities, we are the supplier of choice for professional tool users and do-it-yourselfers everywhere.

Our success is the result of our commitment to provide you with the finest tools in the world. Through continuous improvement in every aspect of our business, we pledge to meet or exceed your expectations.

A handwritten signature in black ink, appearing to read "Allen D. Petersen".

Allen D. Petersen  
Chairman and C.E.O.

A handwritten signature in black ink, appearing to read "Jawad G. Nunes".

Jawad G. Nunes  
President and C.O.O.





is a proud member of:



Automotive Service  
Industry Association



To avoid risk of injury always wear safety glasses and other appropriate safety items for protection. Failure to do so can result in bodily injury. Refer to packaging for proper use of tools and instructions.



# INNOVATION AROUND THE WORLD

## Innovation

Our company has long been a leader in innovation. Since 1885, when the first **IRWIN®** Auger Bit was made, to the invention of the original **WISE-GRIP®** Locking Pliers in 1924, to today's new product introductions - innovation has been our hallmark. We have led the industry with innovations in:



**IRWIN®** Auger Bits  
**MARATHON®** Saw Blades  
**QUICK-GRIP®** Bar Clamps  
**SPEEDBOR2000®** Wood Boring Bits  
**TURBOMAX®** Drill Bits  
**UNIBIT®** Step Drills  
**WISE-GRIP®** Locking Tools  
**LOCK-N-LOAD™** Quick Change Tools  
**FIBERCUT™** Circular Saw Blades

Our product lines have grown, but our commitment to innovation has remained the same. When it comes to tools of the future, one name is still making history – American Tool Companies, Inc.



## Quality

American Tool's strength is based on a dedication to quality. Our tools are made of only the finest materials, manufactured to exacting tolerances. In an effort to manage quality more efficiently, several of our facilities have already received ISO 9000 certification, with others slated to follow in the future. So when you want quality tools and name brands you can trust, look for the name that means quality – American Tool Companies, Inc.

## Customer Service

*One Order. One Invoice. One Shipment.*

That's the commitment of American Tool Logistics and Services (ATLAS). In an effort to continually improve our customer service, you may submit a single order



to obtain any of our famous brand tools. Over 7,000 separate SKUs are located in one central distribution center. Your order will be sent in one shipment billed with a single invoice. All of this from one company – American Tool Companies, Inc.

## Innovative Merchandising

Turn display space into maximized profits. Find the perfect merchandiser match for all of your display needs. Our merchandisers are available in several versatile designs for the perfect fit. Whether you're a small hardware store or a large home center, our merchandisers deliver:

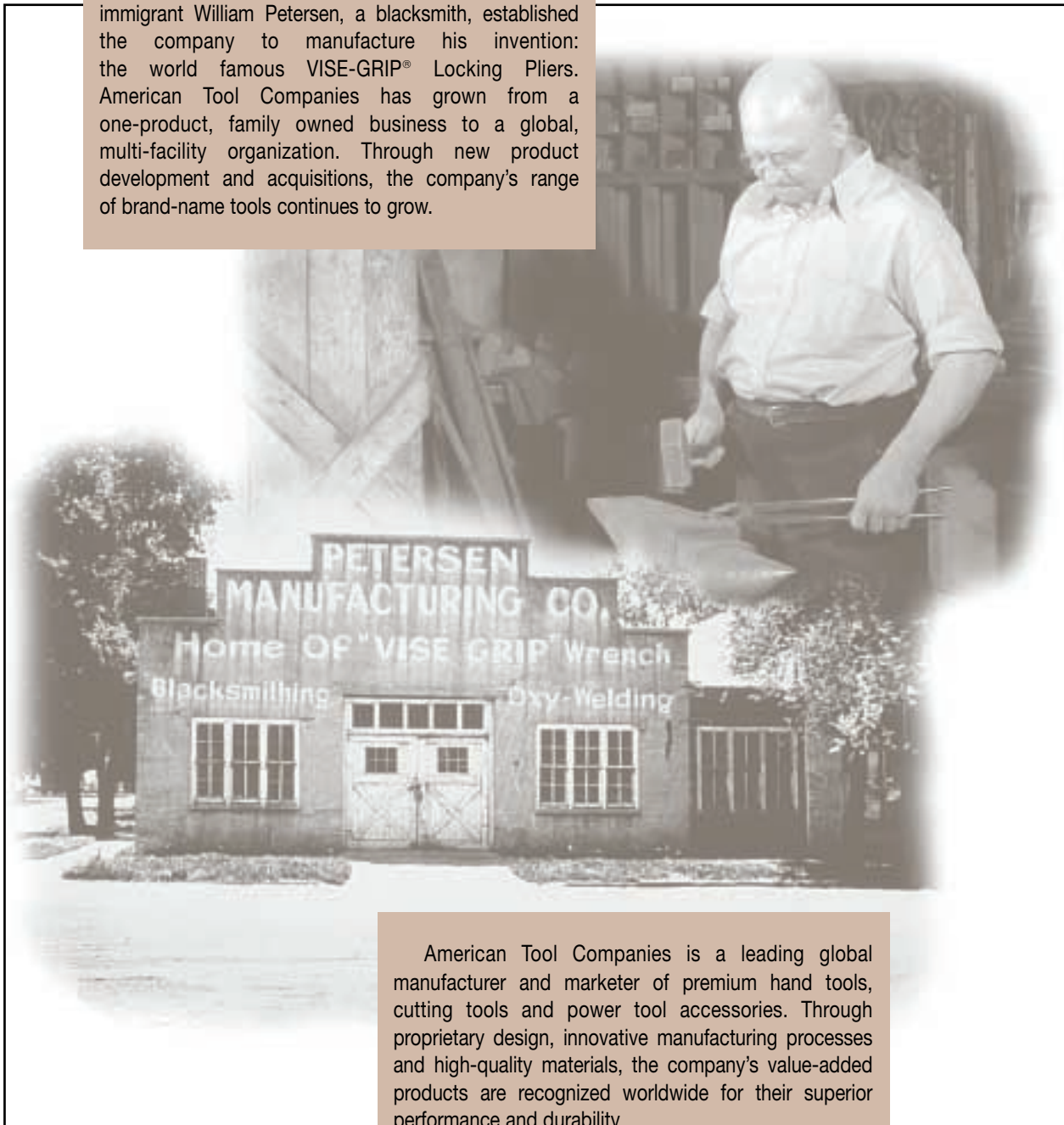
- Increased sales per square foot
- Easy selection
- Brand name recognition
- Display space organization
- Impulse sales
- Powerful graphics and product information



The same company that brings you innovative packaging and products, delivered with one invoice and one shipment, also delivers increased merchandising power – American Tool Companies, Inc.

# FROM A SINGLE TOOL...

The company was founded in 1924 as Petersen Manufacturing Co., Inc., in DeWitt, Nebraska. Danish immigrant William Petersen, a blacksmith, established the company to manufacture his invention: the world famous VISE-GRIP® Locking Pliers. American Tool Companies has grown from a one-product, family owned business to a global, multi-facility organization. Through new product development and acquisitions, the company's range of brand-name tools continues to grow.



American Tool Companies is a leading global manufacturer and marketer of premium hand tools, cutting tools and power tool accessories. Through proprietary design, innovative manufacturing processes and high-quality materials, the company's value-added products are recognized worldwide for their superior performance and durability.

These products are sold to professional craftsmen and do-it-yourselfers through home centers, mass merchandisers, hardware wholesalers, industrial distributors, automotive distributors and major original equipment manufacturers worldwide.

# TO WORLDWIDE PRESENCE



- **Corporate headquarters**  
in Hoffman Estates, Illinois

## Five regional headquarters and their respective regions:

- Carlos Barbosa, Brazil (Latin America)
- Copenhagen, Denmark (Europe, not including United Kingdom, Ireland)
- Sheffield, England (United Kingdom, Ireland)
- Vernon Hills, Illinois (North America)
- Wellsford, New Zealand (Asia/Pacific)

## American Tool Companies' Worldwide Manufacturing Locations:



### Asnæs, Denmark

In 1995, the company acquired Hans Schröder A/S, the world's largest producer of hand saws. The Asnæs plant manufactures JACK® hand saws and blades for hand saws and bow saws for the do-it-yourself and construction markets worldwide.



### Beatrice, Nebraska

The company's two Beatrice facilities manufacture QUICK-GRIP® clamping products, POWERPRESS® pipe clamp/spreaders, HORSEPOWER® handy clamps, CHESCO® hex keys and hex key sets, and PROSNIP® aviation, offset, utility, and tinner snips.



### Benoni, South Africa

Acquired in 1998, this plant manufactures vises and clamps.



### Buffalo, New York

Forgings for PROSNIP® snip blades are produced at this foundry.



### Carlos Barbosa, Brazil

The Carlos Barbosa plant manufactures auger and spade bits, masonry drill bits, twist drills, tile pliers, tile cutters and hand braces, among other products.



### Cumberland, Wisconsin

The Cumberland facility manufactures twist drills. In addition to HANSON® drills for metal and other materials, Cumberland manufactures American Tool Companies' premium TURBOMAX® drill bit line.



### DeWitt, Nebraska

The company's largest single production facility. Established in 1924, the DeWitt complex produces VISE-GRIP® locking tools, locking wrenches and UNIBIT® step drills.



### Gorham, Maine

The Gorham plant manufactures HANSON® taps, dies, screw extractors, tap wrenches, and BLUE DIAMOND™ router bits.



### Ijlst, Netherlands

This facility manufactures NOOITGEDAGT® wood chisels, gouges, planes, wood turning and carving tools, and measuring tools.



### Lexa, Arkansas

The Lexa plant manufactures HANSON® screw-driver bits, nut drivers, and related products.



### Porto, Portugal

This facility manufactures UDEBRIK® and JACK® bow saws.



### Rochester, England

The Rochester factory manufactures STARTRITE® power machinery, including metalworking and woodworking bandsaws, and circular saw machines.



### Rotorua, New Zealand

Circular saw blades for worldwide professional and do-it-yourself tool-user markets are manufactured in Rotorua.



### Sao Paulo, Brazil

The facility manufactures TWILL® high-speed steel and masonry drill bits.



### Sheffield, England

The manufacturing site of RECORD® vises, clamps, planes, bolt cutters, and pipe tools, as well as MARPLES® wood chisels, joiners tools, carving tools, wood boring tools, and GILBOW® snips. In addition, RECORD POWER® machinery is produced at this location.



### Stevenage, England

The Stevenage facility manufactures HILMOR® pipebending equipment.



### Thisted, Denmark

In 1994, American Tool Companies acquired Joran Bor A/S, a leading manufacturer of masonry drill bits for the building and construction markets worldwide.



### Wellsford, New Zealand

The Wellsford plant manufactures circular saw blades, dado sets, and hole saws for distribution worldwide.



### Wilmington, Ohio

The company's Wilmington operations consist of two manufacturing facilities where IRWIN® wood auger bits, STRAIT-LINE® chalk line reels, chalk bottles, and SPEEDBOR2000® bits, spade bits, adjustable wood bits, installer bits, I-100™ bits, LOCK-N-LOAD™ and extensions are produced.



### Wigan, England

The Wigan plant builds horticultural, agricultural, and contractors tools, including spades, shovels, forks, and rakes.

# To Get These Great Names,



## You Just Need This One.



TRUSTED BRANDS. TRUSTED TOOLS.®





## HAND TOOLS

Locking Tools

Clamping Tools

Vises, Clamps, Pipe Tools, Planes and Bolt Cutters

Chisels

Snips

Hex Tools

Marking Tools

Hand Saws



## POWER TOOL ACCESSORIES

Saw Blades

Quick Change Tools

Wood Boring Tools

Router Bits

Drill Bits

Taps, Dies and Screw Extractors

Step Drills and Carbide Hole Cutters

Masonry Tools

Fastener Drive Tools

Accessories



# TABLE OF CONTENTS

## ACCESSORIES/ABRASIVES

FACE-OFF™ Sanding Discs.....	18-1 • 18-2
HANSON® Abrasive Wheels.....	9-21
HANSON Drill Chuck Keys.....	18-5
HANSON Grinding Point.....	18-4
HANSON Wire Brushes.....	18-3

## BOLT CUTTERS

RECORD® Bolt Cutters.....	3-24 • 3-26
---------------------------	-------------

## CHISELS/CARVING TOOLS

MARPLES® Cabinet Scrapers.....	4-5
MARPLES Carving Tools.....	4-4 • 4-5
MARPLES Chisels.....	4-1 • 4-3
MARPLES Mallets.....	4-4

## CLAMPING TOOLS

HORSEPOWER® Handy Clamp.....	2-7
POWERPRESS® Pipe Clamp.....	2-6
QUICK CHANGE™ QUICK-GRIP® Clamping Tools.....	2-1
QUICK-GRIP Accessories.....	2-5
QUICK-GRIP Clamping Tools.....	2-2 • 2-3; 2-5
QUICK-GRIP Specialty Clamps.....	2-3 • 2-4
QUICK-GRIP Spring Clamps.....	2-4
RECORD Bar Clamps.....	3-16
RECORD C-Clamps.....	3-14 • 3-15
RECORD Corner Clamps.....	3-18
RECORD Miter Clamps.....	3-18
RECORD Speed Clamps.....	3-17 • 3-18
RECORD T-Bar Clamps.....	3-17
RECORD Welding Clamps.....	3-15
WISE-GRIP® Locking Clamps.....	1-5 • 1-6

## DRILL BITS

### MASONRY BITS

HANSON Masonry Drill Bits.....	16-1 • 16-3
IRWIN® Tile Cutters and Accessories.....	16-7
JORAN® Concrete Screw Anchor Bits.....	16-6
JORAN Drill Bits.....	16-4 • 16-6
JORAN UNI-PLUS® Multi-Material Masonry Drill Bits.....	16-4
LOCK-N-LOAD™ Masonry Bits.....	10-2

### STEP DRILLS AND CARBIDE HOLE CUTTERS

LOCK-N-LOAD Step Drill Bit.....	10-2
UNIBIT® Carbide Hole Cutters.....	15-5
UNIBIT Step Drill Bits.....	10-2; 15-1 • 15-4

### TWIST

HANSON Cobalt Drill Bits.....	13-12
HANSON High Speed Steel Drill Bits.....	13-2 • 13-9; 13-14 • 13-26
HANSON Titanium Nitride Coated Drill Bits.....	13-13
LOCK-N-LOAD HSS Drill Bits.....	10-2
TURBOMAX® Drill Bits.....	13-10 • 13-11

### WOOD BORING BITS

IRWIN Adjustable Wood Bits.....	11-13
IRWIN Boring Machine Auger Bits.....	11-7
IRWIN Hand Brace Auger Bits.....	11-8 • 11-10
IRWIN Impact Wrench Auger Bits.....	11-11 • 11-12
IRWIN Installer Bits.....	11-17 • 11-19
IRWIN Power Drill Auger Bits.....	11-4 • 11-6
IRWIN Self-Feed Wood Bits.....	11-14
IRWIN Wood Boring Spade Bits.....	11-1 • 11-3
LOCK-N-LOAD Adjustable Countersink Bits.....	10-3
LOCK-N-LOAD Plug Cutters.....	10-3
LOCK-N-LOAD Wood Boring Bits.....	10-1
SPEEDBOR2000® Wood Boring Bits.....	11-1 • 11-3

## FASTENER DRIVE TOOLS

HANSON Bit Holders - Square Drive and Power.....	17-16 • 17-17
HANSON Fastener Drive System Chart.....	17-1
HANSON Insert Bits.....	17-5 • 17-9
HANSON Nutdrivers.....	17-26 • 17-27
HANSON Nutsetters.....	17-2 • 17-4
HANSON Power Bits.....	17-10 • 17-15
HANSON Screwdrivers.....	17-24 • 17-27
HANSON Sets.....	17-22 • 17-23
HANSON Socket Adapters.....	17-20
HANSON Sockets.....	17-18 • 17-19
HANSON Specialty Tools and Sets.....	17-28 • 17-29
LOCK-N-LOAD Fastener Drive Tools.....	10-3

## HAND SAWS

JACK® Garden Saws.....	8-5
JACK Specialty Saws.....	8-4
JACK XPERT™ Hand Saws.....	8-2
JACKPLUS® Hand Saws.....	8-3
JACKPRO® Hand Saws.....	8-1

## HEX TOOLS

CHESCO® Fold-Up Sets.....	6-2
CHESCO L-Key Hex Tool Sets.....	6-5
CHESCO L-Key Hex Tools.....	6-6 • 6-8
CHESCO T-Handle Sets.....	6-10
CHESCO Vinyl-Grip T-Handle Hex Tools.....	6-9; 6-11

## LOCKING TOOLS

WISE-GRIP Locking Clamps.....	1-5 • 1-6
WISE-GRIP Locking Pliers.....	1-2 • 1-3
WISE-GRIP Locking Specialty Tools.....	1-6 • 1-7
WISE-GRIP Locking Tool Sets.....	1-8
WISE-GRIP Locking Wrenches.....	1-4
WISE-GRIP Replacement Parts.....	1-9

## MARKING TOOLS

MARPLES Gauges.....	4-5
MARPLES Squares and Bevels.....	4-5
SPEED-LINE® Chalk Reel.....	7-1
STRAIT-LINE® Chalk Reels.....	7-1
STRAIT-LINE Marking Tools.....	7-1 • 7-5
STRAIT-LINE Pencils/Chalk/Crayons/Tape.....	7-2 • 7-5

## PLANES

RECORD Plane Accessories.....	3-22
RECORD Planes.....	3-20 • 3-22
RECORD Spoke Shaves.....	3-22

## PIPE WRENCHES/TOOLS

RECORD Pipe Tools.....	3-28 • 3-32
------------------------	-------------

## QUICK CHANGE TOOLS

LOCK-N-LOAD Adjustable Countersinks.....	10-3
LOCK-N-LOAD Fastener Drive Tools.....	10-3
LOCK-N-LOAD HSS Drill Bits.....	10-2
LOCK-N-LOAD Masonry Bits.....	10-2
LOCK-N-LOAD Plug Cutters.....	10-3
LOCK-N-LOAD Step Drill Bits.....	10-2
LOCK-N-LOAD Wood Boring Spade Bits.....	10-1

## ROUTER BITS

BLUE DIAMOND™ Router Bits.....	12-1 • 12-17
--------------------------------	--------------

## SAW BLADES

FIBERCUT™ Circular Saw Blades.....	9-10 • 9-11
HANSON Abrasive Wheels.....	9-21
IRWIN Dado Blades.....	9-14
IRWIN Hole Saws.....	9-19 • 9-20
IRWIN Jig Saw Blades.....	9-15 • 9-16
IRWIN PREMIUM™ Circular Saw Blades.....	9-3 • 9-4
IRWIN PRO™ Circular Saw Blades.....	9-5 • 9-6
IRWIN Reciprocating Saw Blades.....	9-17 • 9-18
IRWIN Steel Circular Saw Blades.....	9-12 • 9-14
MARATHON® Thin Kerf Circular Saw Blades.....	9-1 • 9-2
SPRINT® Circular Saw Blades.....	9-7 • 9-9

## SNIPS/CUTTERS

PROSNIP® Aviation Snips.....	5-1 • 5-2
PROSNIP Offset Snips.....	5-4
PROSNIP Tinner Snips.....	5-5
PROSNIP Utility Snips.....	5-3
RECORD Bolt Cutters.....	3-24 • 3-26

## TAPS, DIES AND SCREW EXTRACTORS

HANSON Screw Extractors.....	14-55 • 14-59
HANSON Taps and Dies.....	14-1 • 14-26; 14-31 • 14-53
HANSON Threading Accessories.....	14-27 • 14-30

## TILE CUTTERS

IRWIN Tile Cutters and Accessories.....	16-7
---	------

## VISES

RECORD Drill Press Vises.....	3-7
RECORD Metalworking Vises.....	3-3 • 3-7
RECORD Woodworking Vises.....	3-10 • 3-12

# ***Locking Tools***

**Locking Pliers**

**Locking Wrenches**

**Locking Clamps**

**Locking Specialty Tools**

**Locking Tool Sets**

**Replacement Parts**





# WISE-GRIP® LOCKING TOOLS

## The World's Most Versatile Hand Tools™


- These tools have hundreds of uses; such as an adjustable wrench, pipe wrench, clamp, pliers, wire cutter, and portable vise



**The only locking  
tools people ask  
for by name.**



# WISE-GRIP® LOCKING PLIERS



**Wire Cutter**

**Adjusting Screw Gives Exacting Pressure**

- Turn adjusting screw to fit work and squeeze handle with one hand to lock on with tremendous pressure
- Stays adjusted for repetitive use

**Tooth Design that Holds**

- Hardened tooth design grips from any angle

**The World's Most Versatile Tool**

- Used for turning, cutting, tightening, clamping and twisting

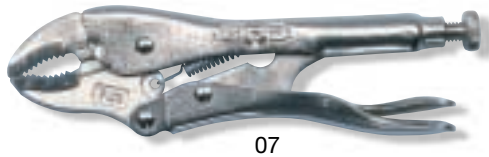
**Built Tough to Last a Lifetime**

- High-grade alloy steels heat treated for maximum toughness and durability

**Guarded Release Helps Keep Work Safe and Fast**

- Guarded release trigger quickly unlocks

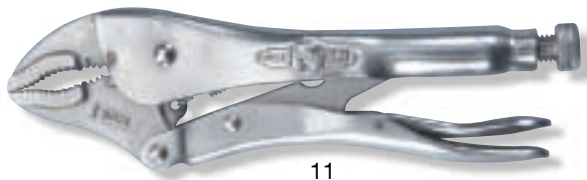
Meets Federal specifications: GGG-W-00649



## Curved Jaw Locking Pliers with Wire Cutter

- Convenient wire cutter cuts up to a 1/4" bolt
- Involute jaw curve permits user to put tremendous pressure on four points of any style nut or bolt head

Description	Size	Jaw Adjustment	Carded Stock #	Boxed Stock #
10WR®	10" / 250 mm	0 - 1-7/8" / 0 - 48 mm	—	05
10WR®-3	10" / 250 mm	0 - 1-7/8" / 0 - 48 mm	0502L3	—
7WR®	7" / 175 mm	0 - 1-5/8" / 0 - 41 mm	—	07
7WR®-3	7" / 175 mm	0 - 1-5/8" / 0 - 41 mm	0702L3	—
5WR®	5" / 125 mm	0 - 1-1/4" / 0 - 29 mm	—	09
5WR®-3	5" / 125 mm	0 - 1-1/4" / 0 - 29 mm	0902L3	—
4WR	4" / 100 mm	0 - 15/16" / 0 - 24 mm	—	10
4WR-3	4" / 100 mm	0 - 15/16" / 0 - 24 mm	1002L3	—



## Curved Jaw Locking Pliers

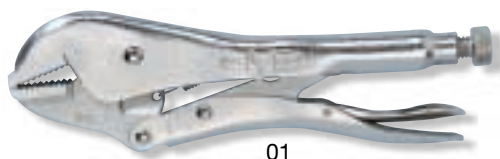
- Involute jaw curve permits user to put tremendous pressure on four points of any style nut or bolt head

Description	Size	Jaw Adjustment	Carded Stock #	Boxed Stock #
10CR®	10" / 250 mm	0 - 1-7/8" / 0 - 48 mm	—	11
10CR®-3	10" / 250 mm	0 - 1-7/8" / 0 - 48 mm	1102L3	—
7CR®	7" / 175 mm	0 - 1-5/8" / 0 - 41 mm	—	13
7CR®-3	7" / 175 mm	0 - 1-5/8" / 0 - 41 mm	1302L3	—

# WISE-GRIP® LOCKING PLIERS

## Straight Jaw Locking Pliers

- Straight jaws allow for maximum contact on flat, square or hex work
- Very popular in welding and other metal work
- Use for safer grinding or as a portable vise



Description	Size	Jaw Adjustment	Carded Stock #	Boxed Stock #
10R®	10" / 250 mm	0 - 1-5/8" / 0 - 41 mm	–	01
10R®-3	10" / 250 mm	0 - 1-5/8" / 0 - 41 mm	0102L3	–
7R®	7" / 175 mm	0 - 1-1/8" / 0 - 29 mm	–	03
7R®-3	7" / 175 mm	0 - 1-1/8" / 0 - 29 mm	0302L3	–

## Long Nose Locking Pliers

- Convenient wire cutter cuts up to a 1/4" bolt
- Long, straight nose allows for use in narrow spaces not reachable by curved or straight jaws
- Use to clamp or tighten bolts or to extract items in hard-to-reach places



Description	Size	Tip Jaw Adjustment	Carded Stock #	Boxed Stock #
9LN®	9" / 225 mm	0 - 2-7/8" / 0 - 73 mm	–	15
9LN®-3	9" / 225 mm	0 - 2-7/8" / 0 - 73 mm	1502L3	–
6LN®	6" / 150 mm	0 - 2-1/4" / 0 - 57 mm	–	14
6LN®-3	6" / 150 mm	0 - 2-1/4" / 0 - 57 mm	1402L3	–
4LN	4" / 100 mm	0 - 1-5/8" / 0 - 41 mm	–	16
4LN-3	4" / 100 mm	0 - 1-5/8" / 0 - 41 mm	1602L3	–

## Bent Nose Locking Pliers

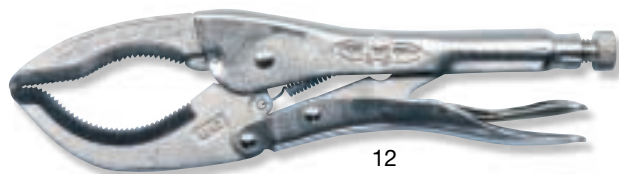
- Bent jaws provide off-angle access to tight places and allow for a better line of sight
- Useful in automotive and electronic applications



Description	Size	Tip Jaw Adjustment	Carded Stock #	Boxed Stock #
9BN	9" / 225 mm	0 - 2-7/8" / 0 - 73 mm	–	154
9BN-3	9" / 225 mm	0 - 2-7/8" / 0 - 73 mm	01542L3	–
6BN	6" / 150 mm	0 - 2-1/4" / 0 - 57 mm	–	144
6BN-3	6" / 150 mm	0 - 2-1/4" / 0 - 57 mm	01442L3	–
4BN	4" / 100 mm	0 - 1-5/8" / 0 - 41 mm	–	164
4BN-3	4" / 100 mm	0 - 1-5/8" / 0 - 41 mm	01642L3	–

## Large Jaw Locking Pliers

- Heavy-duty jaw grips around work of all shapes
- 3-1/8" / 79 mm maximum jaw opening
- Ideal for plumbers, mechanics, welders and others who work with large objects



Description	Size	Jaw Adjustment	Carded Stock #	Carded English Only Stock #
12LC	12" / 300 mm	0 - 3-1/8" / 0 - 79 mm	–	12
12LC-3	12" / 300 mm	0 - 3-1/8" / 0 - 79 mm	12L3	–





# WISE-GRIP® LOCKING CLAMPS

### Guarded Release Helps Keep Work Fast and Safe

- Guarded release trigger quickly unlocks

### Adjusting Screw Gives Exacting Pressure

- Simply turn the adjustment screw to change jaw opening and clamping pressure
- Stays adjusted for repetitive use

### Powerful Locking Mechanism

### Jaws Open Wide to Take on More

- Wide-opening jaws provide greater versatility in clamping a wide variety of shapes



## Locking Clamps with Regular Tips

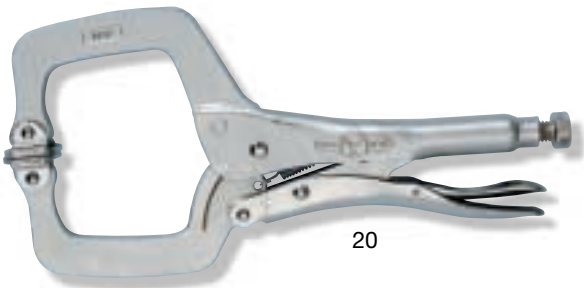
- Locks work with the squeeze of one hand
- High-grade alloy steels heat treated for maximum toughness and durability

Description	Size	Jaw Adjustment	Throat Depth	Carded Stock #
6R®	6" / 150 mm	0 - 2" / 0 - 50 mm	1-1/2" / 38 mm	17
11R®	11" / 275 mm	0 - 4" / 0 - 100 mm	2-5/8" / 67 mm	19
18R®	18" / 455 mm	0 - 8" / 0 - 200 mm	9-1/2" / 241 mm	21
9DR	9" / 225 mm	0 - 4-1/2" / 0 - 112 mm	4-3/4" / 121 mm	30
18DR*	18" / 455 mm	0 - 8" / 0 - 200 mm	9-1/2" / 241 mm	211
24R	24" / 605 mm	0 - 12-1/2" / 0 - 317 mm	15-1/2" / 394 mm	275

\* Extended Throat Width

## Locking Clamps with Swivel Pads

- Swivel pads for holding without damaging work surface



Description	Size	Jaw Adjustment	Throat Depth	Carded Stock #
4SP	4" / 100 mm	0 - 1-5/8" / 0 - 41 mm	1-1/4" / 32 mm	165
6SP	6" / 150 mm	0 - 2-1/8" / 0 - 54 mm	1-1/2" / 38 mm	18
9SP	9" / 225 mm	0 - 4-1/2" / 0 - 112 mm	4-3/4" / 121 mm	31
11SP	11" / 275 mm	0 - 4" / 0 - 102 mm	2-5/8" / 67 mm	20
18SP	18" / 455 mm	0 - 8" / 0 - 200 mm	9-1/2" / 241 mm	22
24SP	24" / 605 mm	0 - 10" / 0 - 254 mm	15-1/2" / 394 mm	28

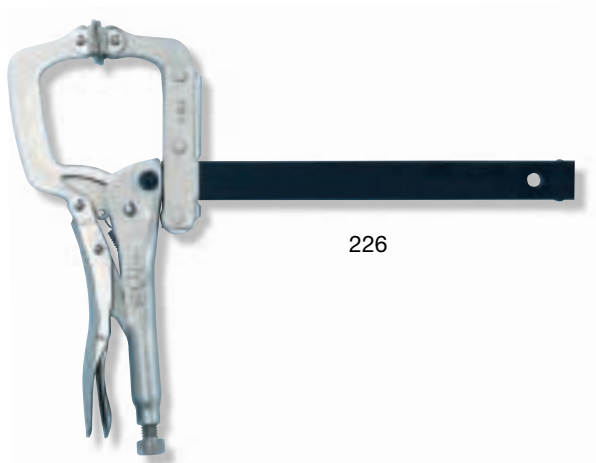
# WISE-GRIP® LOCKING CLAMPS



## Locking Hold Down Clamp

- Self-leveling swivel tip helps hold tapered work, irregular-shaped jobs and delicate objects
- Clamps items securely to most drilling tables and workbenches

Description	Size	Jaw Adjustment	Throat Depth	Clamshell Stock #
11HD	11" / 275 mm	0 - 3-3/4" / 0 - 95 mm	2-1/2" / 64 mm	24



## Locking Bar Clamp

- Moveable jaw slides open to extend clamping capabilities
- Easy locking and quick release action

Description	Size	Jaw Adjustment	Throat Depth	Carded Stock #
310S	10" / 250 mm	0 - 10" / 0 - 250 mm	18" / 457 mm	226

# WISE-GRIP® LOCKING SPECIALTY TOOLS



## Locking Welding Clamp

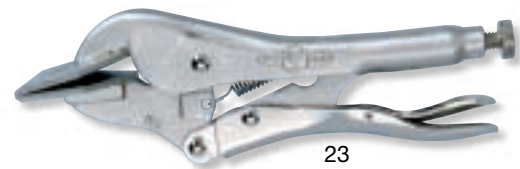
- U-shaped jaws for visibility and working space
- Holds work in proper alignment

Description	Size	Jaw Width	Throat Depth	Boxed Stock #
9R®	9" / 225 mm	2-3/4" / 70 mm	1-5/8" / 41 mm	25

# VISE-GRIP® LOCKING SPECIALTY TOOLS

## Locking Sheet Metal Tool

- Locks to work, eliminates hand gripping
- Makes bending, forming and crimping jobs easier



23

Description	Size	Jaw Width	Throat Depth	Boxed Stock #
8R®	8" / 200 mm	3-1/8" / 78 mm	1-3/4" / 44 mm	23

## Locking Panel Clamp

- Provides quick clamping and alignment of auto body panels
- Bottom jaw slides in straight line motion



251

Description	Size	Jaw Opening	Throat Depth	Boxed Stock #
9AC	9" / 225 mm	3/8" / 10 mm	7/32" / 6 mm	251

## Locking Chain Clamp

- Holds and locks around any shape, any size
- 18" / 455 mm chain, extension chain available

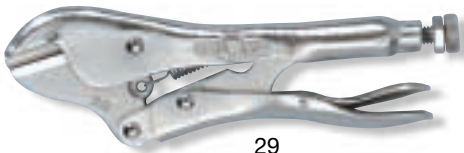


27

Description	Size	Chain Length	Boxed Stock #
20R®	9" / 225 mm	18" / 455 mm	27

## Locking Pinch-Off Tool

- Pinches off and locks on tubing
- Leaves both hands free to do other work



29

Description	Size	Jaw Thickness	Throat Depth	Boxed Stock #
RR®	7" / 175 mm	1/4" / 6 mm	1" / 25 mm	29



# VICE-GRIP® SETS

Locking Tools



68



71



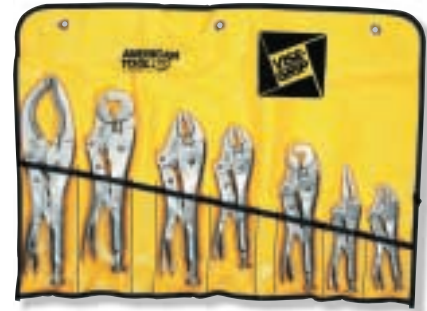
73



74



6142L3



757KB

Description	Contents	Stock #
213H	Home and Hobby Tool Set 1 each - 7WR® and 6LN® Locking Pliers	36
215G	Gift Set 1 each - 10WR® and 5WR® Locking Pliers	37
538KB	5 pc Tool Set 1 each - 10R®, 10CR®, 7WR®, 6LN®, 5WR® Locking Pliers	68
428GS	4 pc Tool Set in Kit Bag 1 each - 10CR®, 7R®, 6LN®, 5WR® Locking Pliers	71
321GS	3 pc Tool Set in Kit Bag 1 each - 10WR®, 6LN®, 5WR® Locking Pliers	73
544T	5 pc Clamping Set 1 - 10R®, 2 - 11R®, 2 - 6R® Locking Pliers and T-shirt	74
614-3	Value Pack 1 each - 10WR®-3 and 5WR®-3 Locking Pliers in break apart packaging	6142L3
615-3	Value Pack 1 each - 7WR®-3 and 6LN®-3 Locking Pliers in break apart packaging	6152L3
757KB	7 pc Tool Set in Kit Bag 1 each - 10WR®, 6LN®, 7WR®, 10LW®, 7LW®, 5WR®, and 12LC Locking Tools	757KB
1080KB	10 pc Tool Set in Kit Bag 1 each - 10WR®, 6LN®, 10LW®, 7LW®, 5WR®, 12LC, 10R®, 9LN®, 7CR®, and 4LW® Locking Tools	1080KB



1080KB



## Locking Tools



**1-9**

# Clamping Tools

Clamping Tools

Spring Clamps

Specialty Clamps

Accessories

Pipe Clamp/Spreaders

Handy Clamps



# QUICK CHANGE™ CLAMPING TOOLS

## High-Tech Resin Construction

- Strength and durability

## Non-Marring, Stay-On Pads

- Soft, pliable, large pads protect finish yet can be replaced

## Quick Advance

- Faster trigger advance action

## Heat-Treated Bar

- Strength, rigidity, resistance to gouging

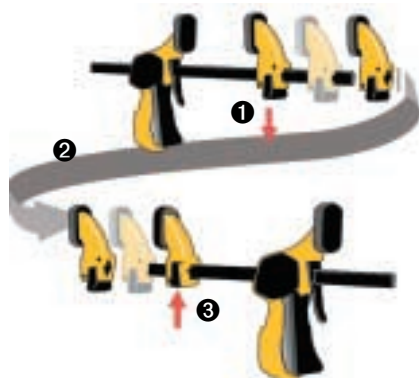
## QUICK CHANGE™ Jaw

- Multi-positioning flexibility

## Pistol Grip QUICK-RELEASE™ Trigger

- Fast and easy positioning

## High Visibility Yellow



- 1 Pull quick-clip down on QUICK CHANGE™ jaw to remove from bar
- 2 Reposition jaw into spreader configuration
- 3 Push quick-clip up to secure QUICK CHANGE™ jaw to the end pin or any position on the bar



## QUICK CHANGE™ Bar Clamp/Spreader

- Converts into a spreader as quick and easy as 1, 2, 3 – no tools required
- The QUICK CHANGE™ multi-position jaw can be positioned anywhere on the bar making even the most challenging clamping or spreading task a snap

Clamping Capacity	Spreading Capacity	Stock #
6" / 150 mm	7-1/2" – 14-5/8" / 195 mm – 360 mm	506QC
12" / 300 mm	7-1/2" – 20-5/8" / 195 mm – 515 mm	512QC
18" / 455 mm	7-1/2" – 26-5/8" / 195 mm – 665 mm	518QC
24" / 605 mm	7-1/2" – 32-5/8" / 195 mm – 820 mm	524QC
36" / 910 mm	7-1/2" – 44-5/8" / 195 mm – 970 mm	536QC
50" / 1265 mm	7-1/2" – 58-5/8" / 195 mm – 1125 mm	550QC



# QUICK-GRIP® CLAMPING TOOLS

## Heat-Treated Bar

- Heat treating bars results in a strong bar which resists flexing, even when the clamp is tightened to its fullest

## High-Tech Resin Material

- This high-tech resin material adds durability to the clamp, yet maintains its lightweight feature

## Non-Marring, Soft Pliable Pads

- Works well with delicate or finished materials

## Pistol Grip

- By merely squeezing the handle, the user can micro-adjust the clamp

## QUICK-RELEASE™ Trigger

- With only one finger on the Quick-Release trigger, the bar slides right into position
- Unlocking is achieved by merely reapplying pressure on the trigger



## Standard Bar Clamps

Max. Jaw Opening Capacity	Throat Depth Capacity	Stock #
6" / 150 mm	3-1/4" / 82.5 mm	506
12" / 300 mm	3-1/4" / 82.5 mm	512
18" / 455 mm	3-1/4" / 82.5 mm	518
24" / 605 mm	3-1/4" / 82.5 mm	524
36" / 910 mm	3-1/4" / 82.5 mm	536
50" / 1300 mm	3-1/4" / 82.5 mm	550

- Provides quick and easy one-handed clamping
- Can't over tighten



5462



546

## Mini Bar Clamps

- 25% smaller than standard QUICK-GRIP bar clamp
- Ideal for smaller projects
- Excellent for working in confined spaces

Max. Jaw Opening Capacity	Throat Depth Capacity	Stock #
6" / 150 mm	2-7/16" / 62 mm	546
6" / 150 mm, 2 Pack		5462
12" / 300 mm	2-7/16" / 62 mm	5412
12" / 300 mm, 2 Pack		54122

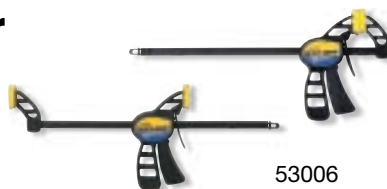


# QUICK-GRIP® CLAMPING TOOLS

## Micro Bar Clamp/Spreader

### • 2 Tools in 1

- Identical operation to standard QUICK-GRIP bar clamp
- Converts to a spreader by reversing clamp pad
- Perfect size for hobby and craft applications
- Ideal for household and shop clamping needs



53006



Max. Jaw Opening Capacity	Throat Depth Capacity	Stock #
4-1/4" / 108 mm	1-3/16" / 30 mm	53006
4-1/4" / 108 mm, 2 Pack		530062
4-1/4" / 108 mm, 10 Pack		53006U

## Macro Bar Clamp/Spreader

- Largest and most powerful QUICK-GRIP bar clamp
- Converts easily to a convenient spreader



53016



Max. Jaw Opening Capacity	Throat Depth Capacity	Stock #
10" / 250 mm	5-1/2" / 136 mm	53016
20" / 500 mm	5-1/2" / 136 mm	53026
33-1/2" / 837 mm	5-1/2" / 136 mm	53046

# QUICK-GRIP® SPECIALTY CLAMPS

## Welding Clamps

- Jaws constructed from heat-treated carbon steel for greater heat dissipation
- Copper plated pads make jaws resistant to welding splatter
- Special horizontal and vertical groove design allows for clamping a variety of materials and shapes
- One jaw swivels to assist in holding round stock



5906



Max. Jaw Opening Capacity	Throat Depth Capacity	Stock #
6" / 150 mm	3-1/4" / 82.5 mm	5906
18" / 455 mm	3-1/4" / 82.5 mm	5918



# QUICK-GRIP® SPECIALTY CLAMPS



556

## Hold-Down and Corner Clamps



577

Description	Contents	Stock #
Hold-Down Clamp	1 - Hold-Down Clamp, 1 - Flange, 1 - Retaining Ring, 4 - Wood Screws, 1 - Clevis Pin and Clip	556
Corner Clamp 7 pc Kit	1 - Corner Clamp, 1 - 506 Standard Bar Clamp, 2 - Regular Pads, 1 - Corner Bracket, 1 - Corner Pad, and 2 - Full Face Pads	577

Clamping Tools

# QUICK-GRIP® SPRING CLAMPS

### High-Tech Resin Material

- Made of durable glass-reinforced nylon affording lightweight durability

### Non-Marring, Soft Pliable Pads

- Spring clamps incorporate soft, pliable, removable pads with each clamp to protect work pieces



### Non-Slip Handles

- Designed for comfortable hand span
- Incorporated into the handles are grooves to prevent slipping for the quickest clamping possible

### Jaws Configured To Odd Shapes

- The jaws are configured to hold odd-shaped work pieces
- Jaws open to complete parallel position

## Spring Clamps

Max. Jaw Opening Capacity	Stock #
1" / 25 mm	58100
2" / 50 mm	58200
3" / 75 mm	58300

# QUICK-GRIP® CLAMPING TOOLS

## Combo Sets



54606



58146



58262

Description	Contents	Stock #
4 pc Set	2 - 546 6" / 150 mm Mini Bar Clamps 2 - 58100 1" / 25 mm Spring Clamps	58146
2 pc Set	1 - 546 6" / 150 mm Mini Bar Clamp 1 - 53006 Micro Bar Clamp/Spreader	54606
4 pc Set	2 - 53006 Micro Bar Clamp/Spreaders 2 - 58100 1" / 25 mm Spring Clamps	581062
3 pc Set	1 - 506 6" / 150 mm Standard Bar Clamp 1 - 546 6" / 150 mm Mini Bar Clamp 1 - 53006 Micro Bar Clamp/Spreader	54636
4 pc Set	1 - 546 6" / 150 mm Mini Bar Clamp 1 - 53006 Micro Bar Clamp/Spreader 2 - 58200 2" / 50 mm Spring Clamps	58246

## QUICK-GRIP® ACCESSORIES

### Kits



40104

Description	Contents	Stock #
Accessory Kit	1 - Corner Bracket 1 - Corner Pad 2 - Full Face Pads	40104
Hold Down Mounting Kit	2 - Retaining Rings 2 - Flanges 2 - Clevis Pins and Clips 8 - Wood Screws	40105

### Pads



40105

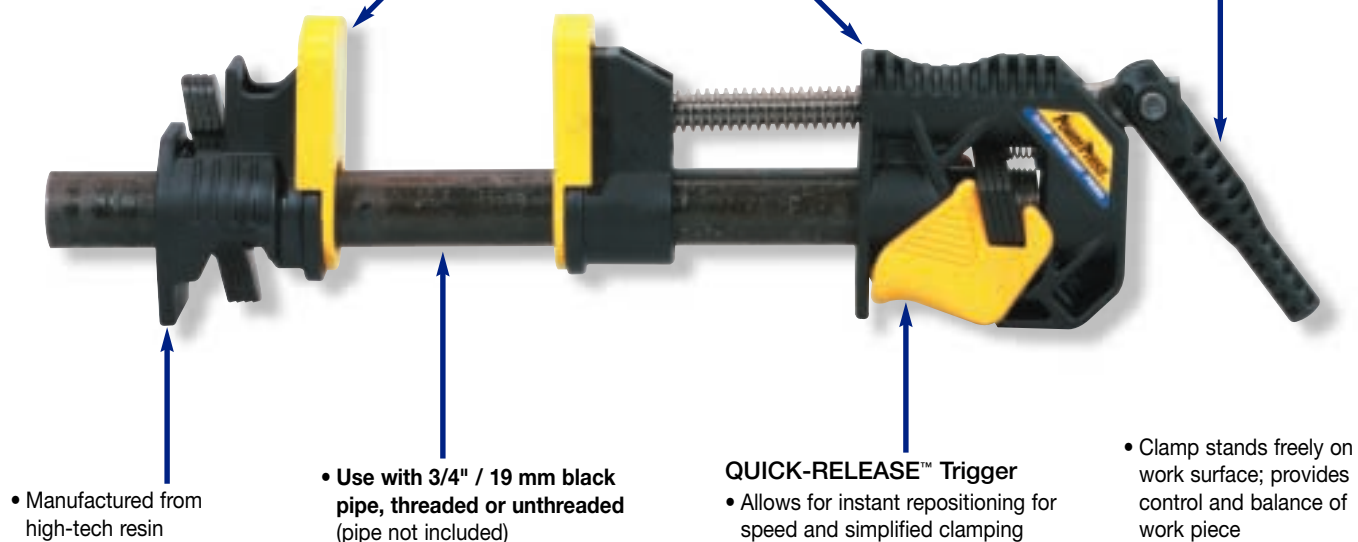
Description	Stock # 2 Pair	Stock # 50 Pair
Corner Bracket and Corner Pad	—	40110
Full Face, Fits Standard Bar Clamp	40200	40111
Regular, Fits Standard Bar Clamp	40150	40155
Regular, Fits Mini Quick-Grip Bar Clamps	59300	59301
Spring Clamp, 1" / 25 mm	59120	59150
Spring Clamp, 2" / 50 mm	59220	59250
Spring Clamp, 3" / 75 mm	59320	59350
Regular, Fits Micro Quick-Grip Bar Clamps	59000	59001
Regular, Fits Macro Quick-Grip Bar Clamps	40160	40165
Stay-On, Fits Standard Quick-Grip and Quick Change Bar Clamps	40150QC	40155QC

# POWERPRESS® PIPE CLAMP/SPREADER

- 2 Clamps in 1**  
• Clamp and spreader

- Both fixtures move freely for easy adjustments along the pipe

- Flip-Handle**  
• Used to quickly adjust screw pressure



## POWERPRESS® Pipe Clamp/Spreader

Description	Stock #
Pipe Clamp/Spreader for 3/4" / 19 mm Black Pipe, Threaded or Unthreaded	590L3
Pipe Clamp/Spreader, 2 Pack for 3/4" / 19 mm Black Pipe, Threaded or Unthreaded	5902L3



5902L3

# HORSEPOWER® HANDY CLAMP

**Turns Work Surface into a Versatile Clamping Center**

Clamping Tools

## Locking Handle

- Produces up to 350 lbs / 160 kg of clamping pressure

## Non-Marring Pads

- Pads hold objects firmly, without marring

## High-Tech Resin Jaws

- Made of high-tech resins which are tough and durable, yet lightweight

## Mounting Made Easy

- Four lag bolts and mounting brackets included for versatile secure use

- Use with 3/4" / 19 mm black pipe, threaded one end (pipe not included)

## Versatile Jaws

- Rotate 180° for a variety of clamping - from above the work surface to below; can even rotate out of the way



## HORSEPOWER® Handy Clamp

Description	Contents	Stock #
Clamp and Mounting Kit		570L3
Mounting Kit	2 - Mounting Brackets 4 - Lag Screws	571L3



# ***Vises, Clamps, Pipe Tools, Planes and Bolt Cutters***

**Metalworking Vises**

**Woodworking Vises**

**Clamps**

**Woodworking Planes**

**Bolt Cutters**

**Pipe Tools**

**Stands**





# RECORD® METALWORKING VISES

**RECORD Vises have SAFETY FEATURES built into each and every vise!**

- RECORD vises are designed to provide full strength performance at any jaw opening
- The sliding section will not fall out when fully extended
- The handle is designed to bend before the vise is overstressed, and if you push it further the mainscrew is designed to strip
- If continued pressure is applied (bent handle and stripped mainscrew) the sliding jaw may break - safely without flying or splintering
- *Rule Of Thumb:*  
Weight of vise should compliment the weight of the work



To avoid risk of injury always wear safety glasses and other appropriate safety items for protection. Failure to do so can result in bodily injury.

# RECORD® METALWORKING VISES

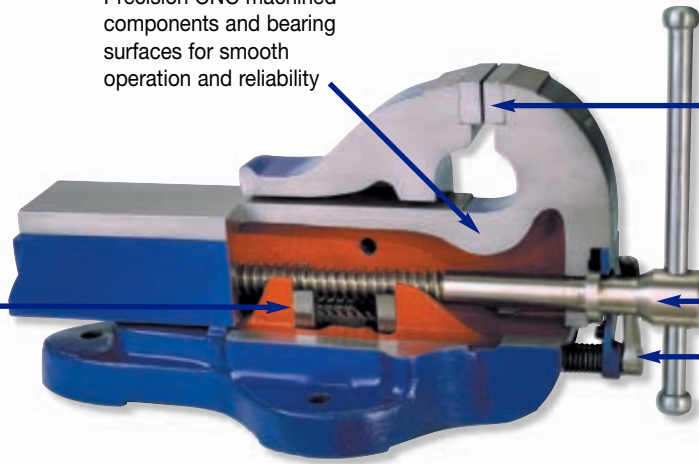
RECORD vises are among the best of their type anywhere in the world, and are known for the high-quality of design, material, and manufacturing standards

- All components are available as replacement parts in case of wear or damage

- RECORD vises stop before the Nut Length to Mainscrew ratio drops below 2.1 to 1

- Long unbreakable nut locked and dovetailed into the body. Helps ensure maximum thread surface contact and constant alignment between the body and sliding jaw

- Precision CNC machined components and bearing surfaces for smooth operation and reliability



- Replaceable hardened steel jaw plates

- High-grade steel mainscrew and handle

- Quick-release mechanism fitted to a group of specialty vises unlocks the mainscrew to allow rapid movement of the jaw

## SELECTION CHARTS

CATEGORY	DUTY RATING	VISE STOCK NO.	BASIC FEATURES							
			QUALITY GRAY IRON CASTING	S.G. DUCTILE IRON CASTINGS	PLAIN SCREW	QUICK RELEASE	PIPE JAWS	OFF-SET JAWS	INTEGRAL ANVIL	SWIVEL BASE
Mechanics	Med.	1B, 3B, 4B, 5B, 6B, 8B	•		•					
Mechanics	Med.	3VSB, 5VSB, 6VSB, 8VSB	•		•					•
Home Workshop	Med.	1TON-E-VSB, 3TON-3VSB, 5TON-5VSB, 6TON-6VSB, 2100B	•		•		•		•	•
Table	Med.	V75B	•		•		•		•	
Reversible	Med.	2075B	•		•				•	•
Fitters	Hvy.	23B, 25B	•			•				
Fitters	Hvy.	23VSB, 25VSB	•			•				•
Engineers	Hvy.	84-34B, 36B		•		•			•	
Engineers	Hvy.	84-34VSB, 36VSB		•		•			•	•
Engineers	Super	112, 114		•		•			•	
Multi-Purpose	Hvy.	75B		•	•		•	•	•	•
All Steel	Hvy.	EV150, EV200	•		•				•	
Drill Press	Med.	413, 414, DMD/PV3, DMD/PV4	•				•			

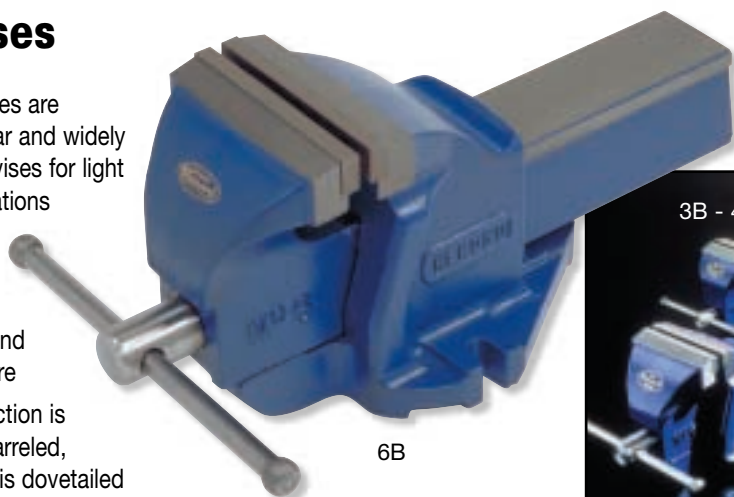
		JAW WIDTH								
MAXIMUM JAW OPENING INCHES	MILLIMETERS	3" 75 mm	3-1/2" 90 mm	4" 100 mm	4-1/4" 110 mm	4-1/2" 115 mm	5" 125 mm	5-1/4" 135 mm	6" 150 mm	8" 205 mm
2	50	V75B								
2-1/2	65	413								
3	75			414, DMD/PV3						
3-1/4	85	1B								
3-1/2	90		2075B*							
4-1/4	110			1TON-E-VSB	DMD/PV4					
4-1/2	115			2100B						
4-3/4	120			3B, 3VSB, 3TON-3VSB						
5-1/2	140					4B				
5-3/4	145					84-34B, 84-34VSB	5TON-5VSB		6TON-6VSB	
6-1/2	165						5B, 5VSB			
7	180		2075B*		23B, 23VSB			75B	EV150	
7-1/4	185								112	
7-1/2	190								36B, 36VSB	
8	205								6B, 6VSB	
8-1/4	210								25B, 25VSB	
9-1/4	235									8B, 8VSB, 114, EV200

\* Reversible Vise

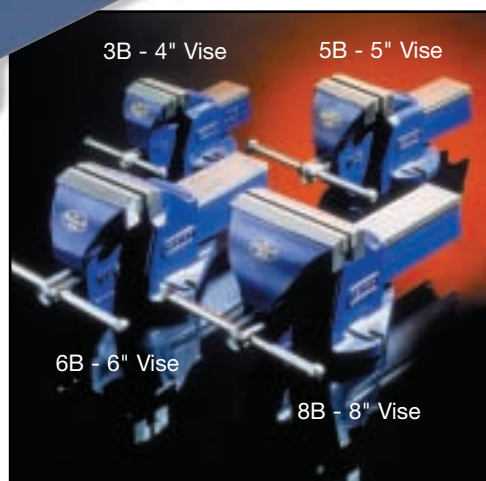
# RECORD® METALWORKING VISES

## Mechanic Vises

- RECORD Mechanic Vises are among the most popular and widely used general-purpose vises for light to medium duty applications
- High-quality gray iron castings, machined to very close tolerances, are designed to withstand distortion under pressure
- Smooth, dependable action is provided by the long barreled, unbreakable nut which is dovetailed into the body
- Alignment of mainscrew and nut reduces wear and gives long, trouble-free service



6B



3B - 4" Vise

5B - 5" Vise

6B - 6" Vise

8B - 8" Vise

### Materials:

*Body and sliding jaw*, high-quality castings of guaranteed strength

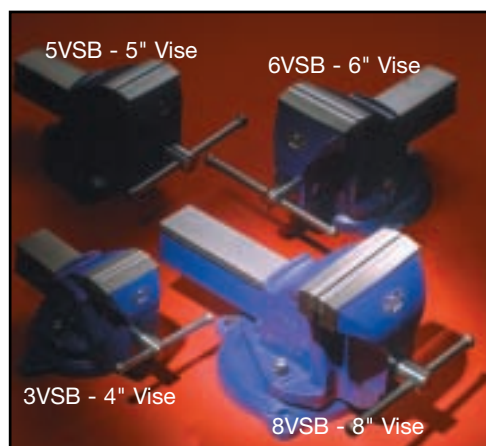
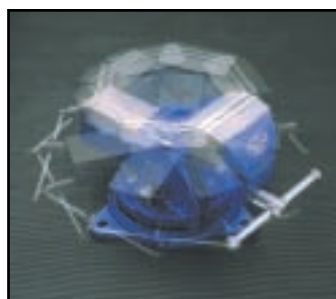
*Jaw plates*, hardened steel, renewable and interchangeable file cut

*Mainscrew*, high-quality steel

Jaw Width		Jaw Opening		Jaw Depth		Optional Fiber Grips	Stock #
3"	75 mm	3-3/4"	95 mm	1-7/8"	48 mm	FG3	1B
4"	100 mm	4-3/4"	121 mm	2-3/4"	70 mm	FG4	3B
4-1/2"	115 mm	5-1/2"	140 mm	3"	75 mm	FG4-1/2	4B
5"	127 mm	6-1/2"	165 mm	3-1/4"	82 mm	FG5	5B
6"	152 mm	8"	203 mm	3-1/2"	90 mm	FG6	6B
8"	203 mm	9-1/4"	235 mm	4"	100 mm	N/A	8B

## Mechanic Vises with Swivel Base

- Swivel bases can be fitted to any mechanic vise. All the vises in this range are fitted with this feature as standard equipment
- The swivel base allows the vise to be rotated through 360° and locked in any desired position. This can be an advantage in confined spaces or where the angle of the vise has to be adjusted to accept work of varying lengths



5VSB - 5" Vise

6VSB - 6" Vise

3VSB - 4" Vise

8VSB - 8" Vise

Jaw Width		Jaw Opening		Jaw Depth		Optional Fiber Grips	Stock #
4"	100 mm	4-3/4"	121 mm	2-3/4"	70 mm	FG4	3VSB
5"	127 mm	6-1/2"	165 mm	3-1/4"	82 mm	FG5	5VSB
6"	152 mm	8"	203 mm	3-1/2"	90 mm	FG6	6VSB
8"	203 mm	9-1/4"	235 mm	4"	100 mm	N/A	8VSB



# RECORD® METALWORKING VISES



1TON-E-VSB

## Home Workshop Vises

- The 2100B – 1 Ton Multi-Purpose Vise features an integral anvil – ideal for the professional, tradesman, or handyman – at an affordable price
- Fail-safe stress bearing components help prevent damage to vise mechanism
- Replaceable steel jaw plates
- Integral anvil and pipe jaws
- Steel mainscrew with two-start “acme” thread for fast smooth operation
- Safety stop helps prevent jaw falling out at maximum capacity

Jaw Width		Jaw Opening		Jaw Depth		Optional Fiber Grips	Stock #
4"	100 mm	4-1/4"	108 mm	2-3/8"	60 mm	FG4	1TON-E-VSB
4"	100 mm	4-3/4"	121 mm	2-3/4"	70 mm	FG4	3TON-3VSB
5"	127 mm	5-3/4"	145 mm	3-1/8"	80 mm	FG5	5TON-5VSB
6"	152 mm	5-3/4"	145 mm	3-1/8"	80 mm	FG6	6TON-6VSB
4"	100 mm	4-1/2"	115 mm	2-3/8"	60 mm	FG4	2100B
Multi-Purpose (no Swivel Base)							



V75B

## Home Workshop Table Vise

- This is an ideal portable vise for the amateur and model maker
- The built-in clamp allows it to be easily and quickly attached to a bench, table or work surface. Pipe grips are incorporated below the parallel jaws
- A useful anvil is also included on the rear of the body

### Materials:

*Body and front jaw, high-quality castings of guaranteed strength*

*Front jaw guide rods, steel*

*Mainscrew, high-quality steel with two-start thread for smooth action*

Jaw Width		Jaw Opening		Jaw Depth		Clamp Capacity	Optional Fiber Grips	Stock #
3"	75 mm	2"	50 mm	1-1/4"	32 mm	1-5/8" 42 mm	FG3	V75B

# RECORD® METALWORKING VISES

## Reversible Vise

- Great for hobbies, crafts, woodworking, electronics — in the home or the shop
- The polypropylene jaws provide a firm grip and a soft touch on hard or delicate surfaces. Under pressure these jaws form to the contours of the workpiece, and return to their original shape when the work is removed
- The reversible feature allows the jaw capacity to be doubled from 3-1/2" (90 mm) to 7" (178 mm) by removing the main-screw guide rods/sliding jaw section and placing it in the back of the body, hence the term "reversible"



- The 360° swivel base and integral 7/8" (22 mm) pipe jaws along with the integral anvil make the Reversible Vise great for hundreds of applications

Jaw Width		Jaw Opening		Jaw Depth		Pipe Jaw Capacity O.D.		Stock #
3-1/2"	90 mm	3-1/2"	90 mm	1-5/8"	42 mm	7/8"	22 mm	2075B
Reversed		7"	178 mm					

## Heavy-Duty Fitters Vises with Quick-Release

- These heavy-duty vises meet the needs of all types of industrial and training workshops where the work ranges from small fitting and filing work to the assembly and fitting of large components
- The quick-release mechanism reduces operator fatigue and saves man hours
- The quick-release action is most useful where time saving is important, allowing the jaw to be opened or closed without winding the screw
- The small trigger along side the drop handle fitted to the main-screw head, can be pressed to allow instant movement of the jaw, through a half-nut mechanism working in conjunction with threaded screw



25VSB



### Materials:

*Body and sliding jaw*, high-quality castings of guaranteed strength

*Jaw plates*, hardened steel, renewable and interchangeable

*Mainscrew*, high-quality steel

Jaw Width		Jaw Opening		Jaw Depth		Optional Fiber Grip	Stock #
4-1/4"	108 mm	6-1/2"	165 mm	3-3/8"	85 mm	FG4 1/4	23B
6"	152 mm	8-1/4"	210 mm	4-1/2"	115 mm	FG6	25B
4-1/4"	108 mm	6-1/2"	165 mm	3-3/8"	85 mm	FG4 1/4	23VSB
with Swivel Base							
6"	152 mm	8-1/4"	210 mm	4-1/2"	115 mm	FG6	25VSB
with Swivel Base							

# RECORD® METALWORKING VISES



## Heavy-Duty Engineers Vises with Quick-Release

### Heavy-Duty 84-34 and 36 Series

- Available in two sizes with jaw capacities up to 7-1/2" (190 mm). The jaw and slide design provides extra space for holding irregular-shaped work
- Made from S.G. Ductile iron for high impact resistance
- An ideal vise for fitting and filing. An integral anvil permits hammering. Swivel base versions available

#### Materials:

*Body and sliding jaw*, high-tensile castings with solid steel slide bar

*Jaw plates*, hardened steel, renewable and interchangeable. Secured in position by hexagon head bolts

*Anvil*, hardened steel

*Mainscrew*, high-quality steel fitted with anti-friction thrust washer

84-34VSB



### Super Duty 112-114 Series

- Available in two sizes: 112 with a 7-1/4" (185 mm) jaw capacity and 114 with a 9-1/4" (235 mm) capacity. The strongly braced body, heavy sliding jaw and large diameter screw are built to withstand the toughest use
- Ideal for chipping, hammering and other demanding work. Jaw plates are bolted through for rigidity
- Made from S.G. Ductile iron for high impact resistance
- The quick opening and closing features of dual-action vises save time and effort. The special, self-cleaning, buttress thread produces maximum and reliable grip under various working conditions

#### Materials:

*Body and slide*, high-tensile castings helps against breakage

*Jaw plates*, hardened steel, renewable and interchangeable

*Mainscrew*, high-quality steel and fitted with an anti-friction thrust washer

114

Jaw Width		Jaw Opening		Jaw Depth		Optional Fiber Grip	Stock #
4-1/2"	115 mm	5-3/4"	145 mm	3-1/8"	80 mm	FG4 1/2	84-34B
4-1/2"	115 mm	5-3/4"	145 mm	3-1/8"	80 mm	FG4 1/2	84-34VSB
with Swivel Base							
6"	152 mm	7-1/2"	190 mm	4"	100 mm	FG6	36B
6"	152 mm	7-1/2"	190 mm	4"	100 mm	FG6	36VSB
with Swivel Base							
6"	152 mm	7-1/4"	185 mm	3-3/4"	95 mm	FG6	112
8"	203 mm	9-1/4"	235 mm	4-1/2"	115 mm	N/A	114

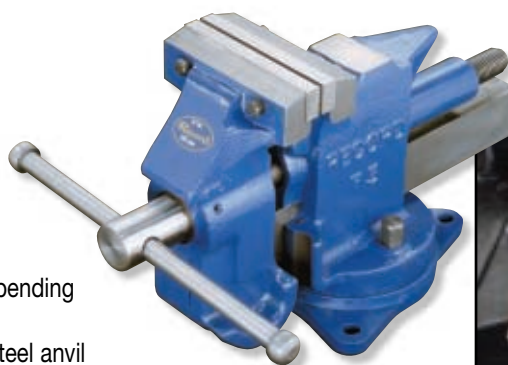


# RECORD® METALWORKING VISES

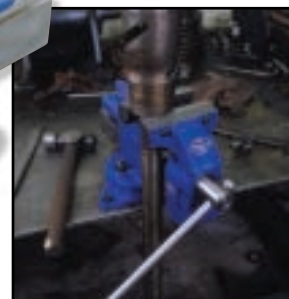
## Heavy-Duty Multi-Purpose Vise

- Built to withstand rough usage, the RECORD 75B Vise has a wide range of uses in general industrial, commercial garages and teaching workshops. The solid steel slide bar offers great strength combined with ample clearance below the jaws, enabling large and irregular-shaped work to be gripped
- Offset jaws to hold long and wide work vertically
- Long nut ensures constant alignment of screw mechanism

- Integral swivel base allows 360° rotation
- Former for bending pipe/rod
- Hardened steel anvil
- Pipe grips



75B



Jaw Width		Jaw Opening		Jaw Depth		Clamp Capacity	Optional Fiber Grip	Stock #
5-1/4"	133 mm	7"	178 mm	3-3/4"	95 mm	2-3/4"	70 mm	FG5 1/4 75B

## All-Steel Vises

- RECORD steel buttress gives rigid support for nut while allowing constant alignment of the mainscrew and nut
- Steel anvil provides support for heavy hammering
- RECORD tenon helps ensure constant alignment of jaws
- Spring pin provides a positive stop and prevents accidental removal of sliding section

- Nut securing pin allows removal of nut while vise is still mounted on bench
- Jaw plates made of hardened steel and serrated to provide extra grip
- Two-start acme thread mainscrew



EV200

Jaw Width		Jaw Opening		Jaw Depth		Optional Fiber Grip	Stock #
6"	152 mm	7"	178 mm	3"	75 mm	FG6	EV150
8"	203 mm	9-1/4"	235 mm	4-3/4"	121 mm	N/A	EV200

## Drill Press Vises

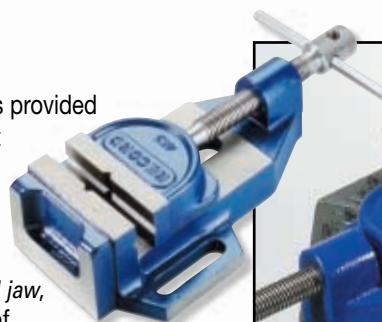
- Designed for drill press work, the sliding jaw is a non-lifting swivel type capable of holding any shape of workpiece. By swivelling through 90°, the jaw is easily removed if required. The horizontal and vertical vees accommodate round sections securely. The base is slotted to enable the vise to be bolted to drill tables
- Base, end face and side faces are machined to assist quick and accurate positioning

- A loose tommy bar is provided for screw adjustment (Bolts not included)

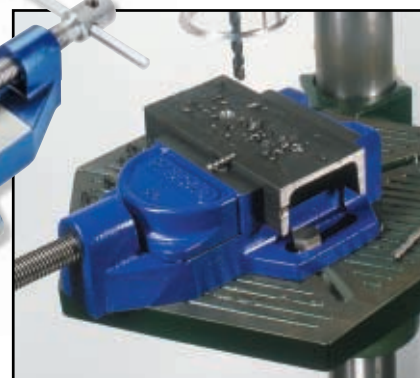
### Materials:

*Body and sliding swivel jaw, high-quality castings of guaranteed strength*

*Mainscrew, high-quality steel*



413



Jaw Width		Jaw Opening		Jaw Depth		Stock #
3"	75 mm	2-1/2"	64 mm	1"	25 mm	413
4"	100 mm	3"	75 mm	1-1/4"	32 mm	414

### ECONOMY

4"	100 mm	3"	75 mm			DMD/PV3
4-1/2"	115 mm	4-3/8"	111 mm			DMD/PV4

### ECONOMY MODEL

- Does not swivel, fixed base
- Not machined • No tommy bar



# RECORD® METALWORKING VISES

## ACCESSORIES



FG4

Jaw Width		Stock #
3"	75 mm	FG3
4"	100 mm	FG4
4-1/4"	108 mm	FG4-1/4
4-1/2"	115 mm	FG4-1/2
5"	127 mm	FG5
5-1/4"	133 mm	FG5-1/4
6"	152 mm	FG6

- Fiber grips for gripping soft, delicate or highly-polished work
- Sizes available for most RECORD vises. (Except 8B, 8VSB, 114 and EV200)

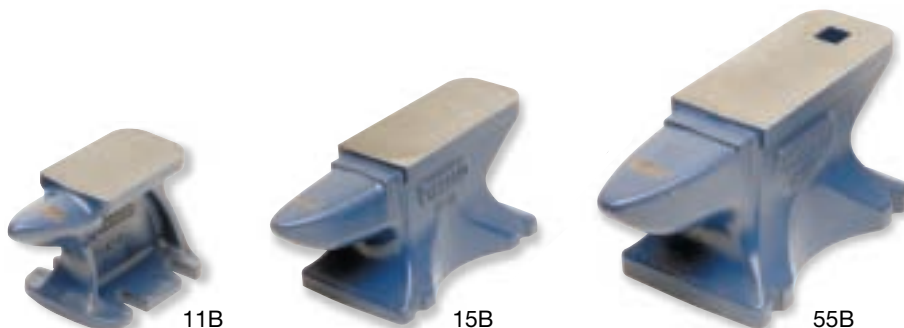


6/8/36SB

Description	Stock #
1B	1SB
3B	3SB
4B (Also fits 5B)	4SB
5B/84-34B (Also fits 23B)	5SB/84-34SB
6B/8B/36B (Also fits 25B)	6/8/36SB

## Swivel Bases

- Swivel base sizes to fit mechanic vises
- 360° rotation for the most convenient working angles



11B

15B

55B

Description		Stock #
11 lb	5 kg	11B
33 lb	15 kg	15B
55 lb	25 kg	55B

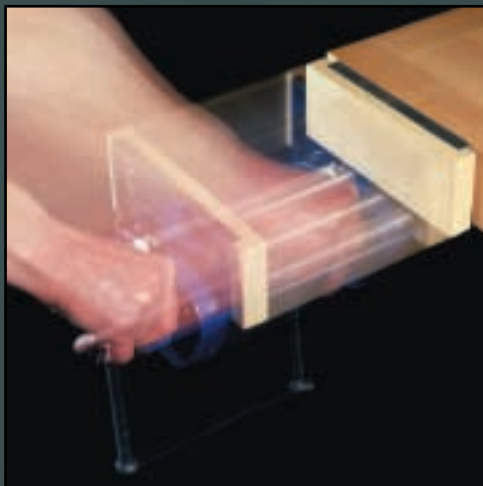
## Anvils

- Cast in solid gray iron which makes them strong, tough, and shock absorbent
- Accurately machined base and top plate for secure mounting and accuracy in use
- Shaping horn – accommodates a wide range of forming and shaping jobs

# RECORD® WOODWORKING VISES

*RECORD Vises have long established design and manufacturing features which include:*

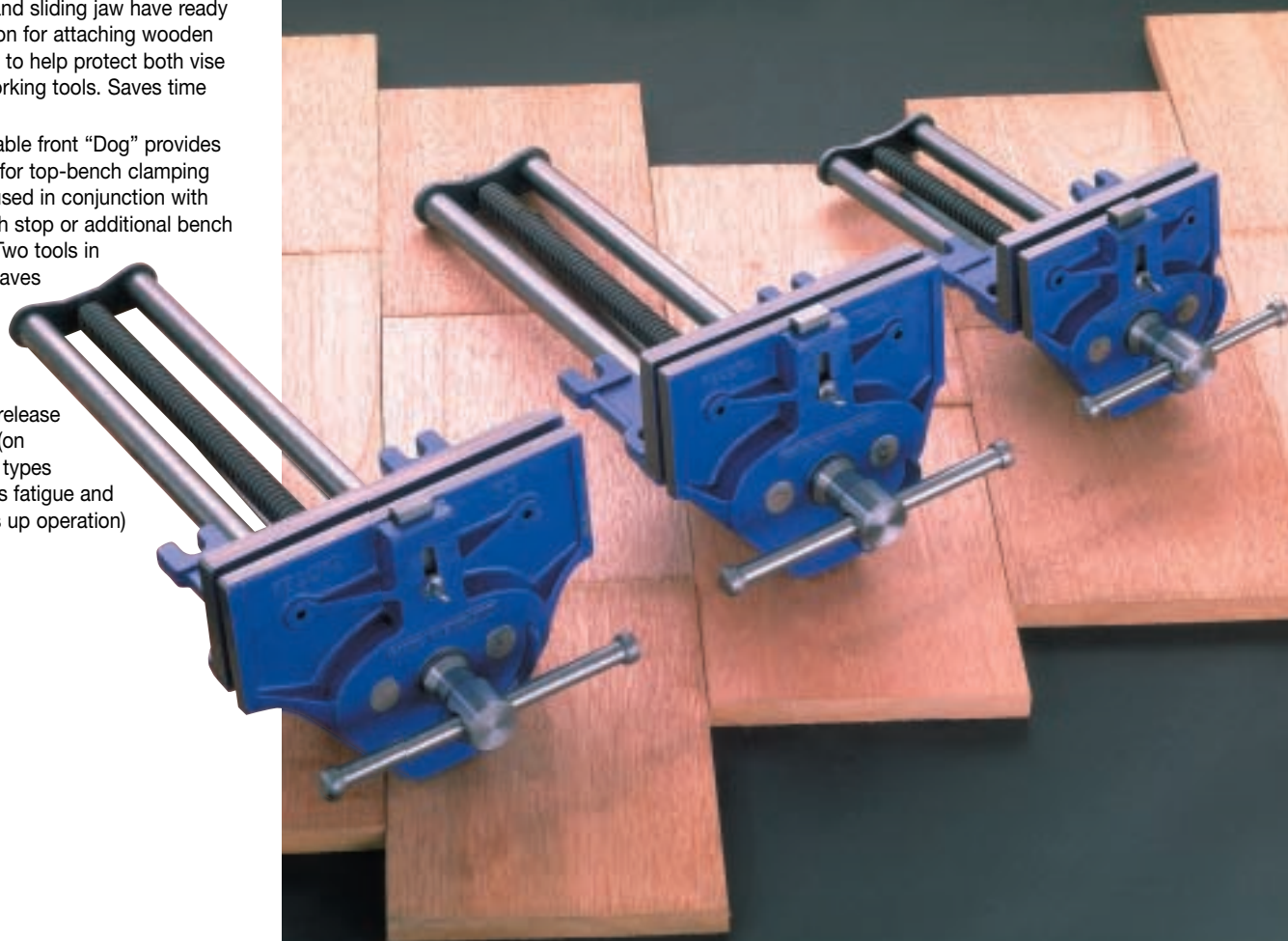
- Robust castings made in our own foundry for long, trouble-free service
- Accurately machined housings for smooth sliding movement
- Toe-in towards top of jaws helps ensure firm grip at all times
- Working parts protected from dirt and sawdust - reduces wear and helps maintain reliable action
- Square body seating for easy fitting to the workbench
- Body and sliding jaw have ready provision for attaching wooden cheeks to help protect both vise and working tools. Saves time
- Adjustable front "Dog" provides facility for top-bench clamping when used in conjunction with a bench stop or additional bench dogs. Two tools in one - saves time and money
- Quick-release action (on certain types reduces fatigue and speeds up operation)



## Quick-Release Vises



- Squeeze the trigger, and a quick-release vise can be opened and closed without using the mainscrew
- Large and small workpieces can be quickly interchanged
- Releasing the trigger returns the mechanism to standard for fine adjustment



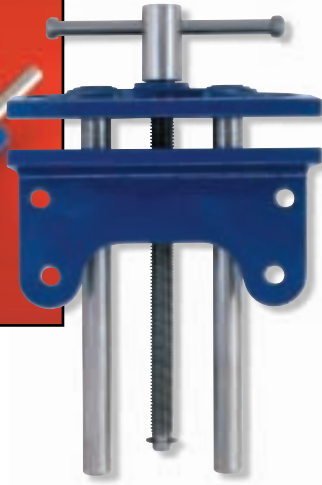
# RECORD® Woodworking Vises

## Hobby Woodworking Vises



### Woodcraft Vise V149B

- A cost-effective alternative to the popular V175B, designed for mounting underneath the bench so the top of the jaws are flush with the bench top



### Woodcraft Vise V150B

- A useful portable vise that can be attached to most working surfaces by means of a 2-1/4" (57 mm) capacity integral clamp
- Provision is also made for the body to be screwed permanently to the bench if desired



### Woodcraft Vise V175B

- Designed for the user who requires a more robust vise that is permanently fixed, and with a larger capacity than offered by the V150B
- These vises are lighter in construction than standard woodworking vises – and are ideal for the amateur and hobbyist
- The body and sliding jaws are high-quality castings fitted with accurately aligned steel slide bars and mainscrew. The mainscrews have rolled two-start acme threads which ensure a smooth, strong action with the integral nut in the vise body



Jaw Width		Jaw Opening		Stock #
6"	152 mm	4-1/2"	115 mm	V149B
6"	152 mm – Portable	4-1/2"	115 mm	V150B
7"	178 mm	6-1/2"	165 mm	V175B

# RECORD® WOODWORKING VISES

## Carvers Vise

- Strong and portable. Clamps to any surface up to 4" (100 mm) thick. Adjustable for height, angle, and rotation
- Ideal for carvers, model makers and hobbyists



RPCV130

### Description

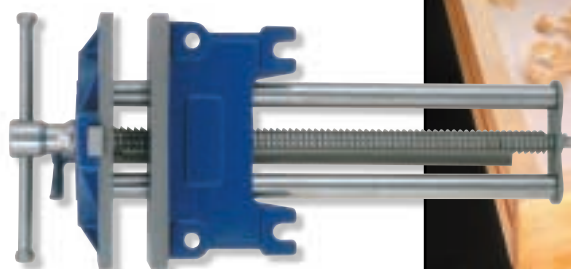
Carvers Vise

### Stock #

RPCV130

## Professional Woodworking Vises

- These vises are equipped with the quick-release mechanism reducing fatigue and speeds up operation
- The adjustable front stop or "dog" gives an additional clamping facility when used in conjunction with a bench stop
- Toe-in towards top of jaws helps ensure firm grip at all times
- Body and sliding jaw have ready provision for attaching wooden cheeks to help protect both vise and working tools. Saves time



52ED



### Jaw Width

7"	178 mm
9"	228 mm
10-1/2"	265 mm

### Jaw Opening

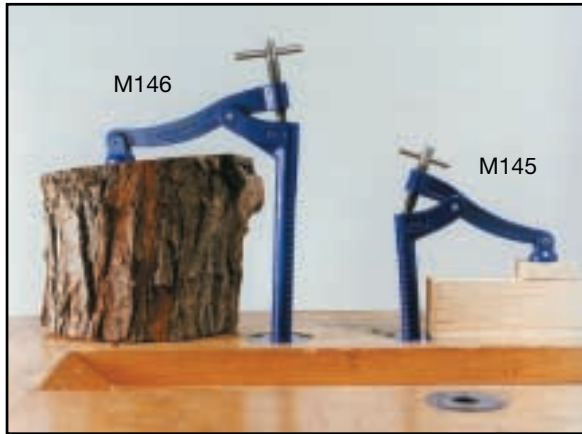
8"	203 mm
13"	330 mm
15"	380 mm

### Stock #

52ED
52-1/2ED
53ED



# RECORD® Woodworking Vises



## Bench Holdfasts

- The bench holdfast holds work flat to the bench top and is as good as an extra hand
- Works easily on awkward shapes that cannot otherwise be held in a vise
- When not required, it can be removed from its collar leaving the bench free

### Materials:

*Shaft and collar*, castings of superior strength

*Screw*, high-quality steel, hardened steel at the working tip

Description	Stock #
6-7/8" 175 mm	M145
Extra Collar for M145	MC145
7-5/8" 194 mm	M146
Extra Collar for M146	MC146



## Bench Screw

- Ideal for making woodworking vises, wine presses or other types of presses.
- Solid steel screw with a smooth action, two-start acme thread.
- Collars included.

Overall Length	Stock #
18" 457 mm	165/18

# RECORD® CLAMPS

*RECORD clamps have been designed with the users and their many varied clamping jobs in mind.*

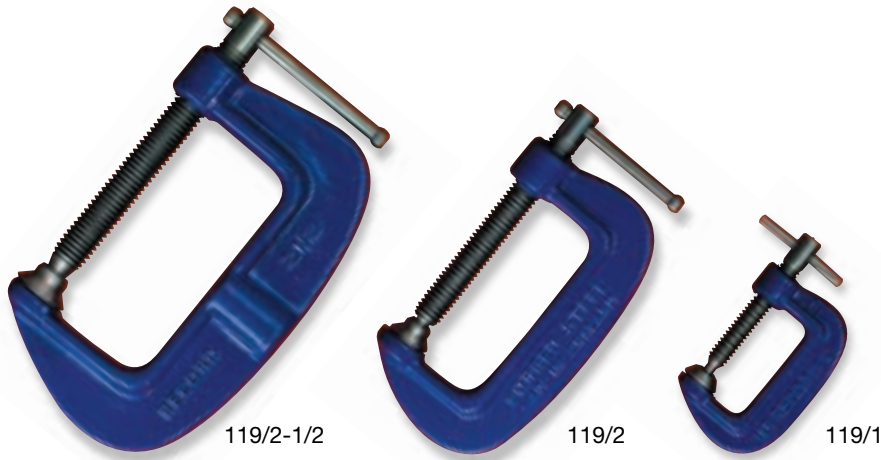
- RECORD clamps are for wood and metalworking
- Three main types of C-Clamps – forged, general purpose and heavy-duty
- Two types of specialist clamps – deep throat and edging
- The frames are stressed and shaped to absorb tensions and compressions well within the limits of the material from which they are made
- The steel mainscrews have a two-start, rolled, thread which provide fast action and strength



# RECORD® CLAMPS

## Forged C-Clamps

119 Series



- A drop-forged steel clamp whose slim section permits use in close situations where space is limited. Particularly useful for the craftsman with smaller work, the boat builder, and the handyman
- Drop forged – far stronger than normal lightweight clamps. Long life
- High-quality steel screw – strong and durable
- Stove-enameled finish on head – rust resistant

Capacity		Frame Proof Load		Stock #
1"	25 mm	–	–	119/1
2"	50 mm	875 lbs	400 kgs	119/2
2-1/2"	64 mm	900 lbs	410 kgs	119/2-1/2



## General Purpose C-Clamps

120 Series



- The most popular clamp in the RECORD range, for general purpose, medium-duty applications. Used in many metal trades, it is available in a wide range of sizes from 2" to 12" (50 mm – 305 mm)
- Cast S.G. Ductile iron frame – strong, long lasting
- High-quality steel screw, with two start thread – strong and durable. Extra fast screwing action. Saves time
- Stove-enameled finish on head – rust resistant

Capacity		Frame Proof Load		Stock #
2"	50 mm	–	–	120/2
3"	75 mm	1,000 lbs	455 kgs	120/3
4"	100 mm	1,200 lbs	545 kgs	120/4
6"	152 mm	1,400 lbs	635 kgs	120/6
8"	203 mm	1,700 lbs	775 kgs	120/8
10"	254 mm	2,200 lbs	1,000 kgs	120/10
12"	305 mm	2,500 lbs	1,135 kgs	120/12



# RECORD® CLAMPS

## Heavy-Duty Forged C-Clamps

### 121 Series

- A heavy-duty forged-steel fabricators clamp. Ideally suited to all types of metal-working, particularly fabrication and welding
- Drop-forged for high strength and long life
- High-quality steel screw with two start thread – strong and durable
- Extra fast screwing action – saves time
- Stove-enameled finish on head – rust resistant
- Sizes 3" - 8" close completely



Capacity		Throat Depth		Frame Proof Load		Stock #
3"	75 mm	2-1/8"	54 mm	6,000 lbs	2,720 kgs	121/3
4"	100 mm	2-3/4"	70 mm	7,000 lbs	3,170 kgs	121/4
6"	152 mm	3-5/8"	92 mm	9,000 lbs	4,080 kgs	121/6
8"	203 mm	3-5/8"	92 mm	12,500 lbs	5,670 kgs	121/8
10"	254 mm	4"	100 mm	13,750 lbs	6,240 kgs	121/10
12"	305 mm	4-1/2"	115 mm	15,000 lbs	6,800 kgs	121/12

## Heavy-Duty Forged Plated Screw Welding Clamps

- Heavy Duty – drop-forged steel, "C" Clamps for welding applications. Copper plated pad, and acme thread screw resists any spatter build up



Capacity		Throat Depth		Frame Proof Load		Stock #
3"	75 mm	2-1/8"	54 mm	6,000 lbs	2,720 kgs	121W/3
4"	100 mm	2-3/4"	70 mm	7,000 lbs	3,170 kgs	121W/4
6"	152 mm	3-5/8"	92 mm	9,000 lbs	4,080 kgs	121W/6
8"	203 mm	3-5/8"	92 mm	12,500 lbs	5,670 kgs	121W/8



# RECORD® CLAMPS



## Deep Throat Clamp

- A specialist medium duty clamp with an extra deep 4-1/2" (115 mm) throat for clamping well in from the edge of the work. Cast from S.G. Ductile Iron

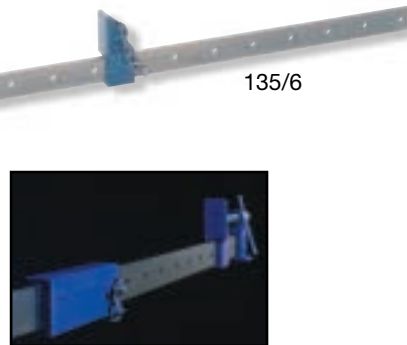
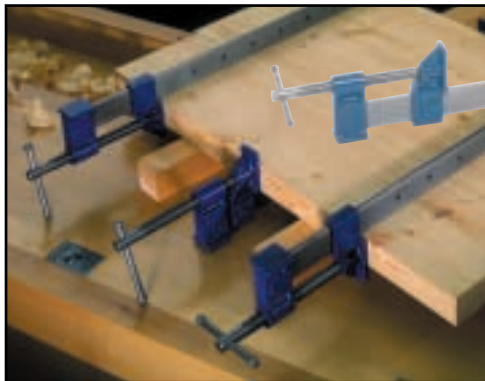
Capacity		Throat Depth		Frame Proof Load		Stock #
4"	100 mm	4-1/2"	115 mm	1,100 lbs	500 kgs	122/4



## Edging Clamp

- Based on the 119 series this drop-forged steel clamp is designed to secure edging strips on straight or curved surfaces

Capacity		Frame Proof Load		Stock #
2-3/8"	60 mm	450 lbs	205 kgs	C129



## Bar/Sash Clamps

135 Series

- Primarily designed for the clamping of large section workpieces during joint gluing, but can also be used for general, large-scale clamping applications
- Cast-iron head and slides, high-quality steel bar, handle, screw and pin
- Working slide principle incorporating large thrust surfaces helps ensure high wear resistance, long life
- Range of seven sizes plus lengthening bar offers the user clamping facilities from 18" to 90" (457 – 2285 mm)

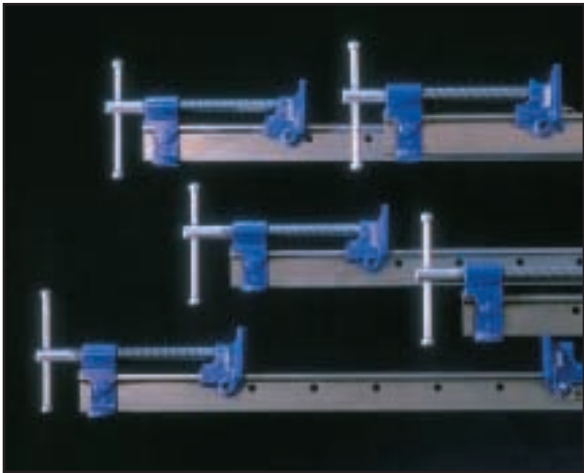
Capacity		Bar Length		Stock #
18"	457 mm	24"	610 mm	135/1
24"	610 mm	30"	761 mm	135/2
30"	761 mm	36"	915 mm	135/3
36"	915 mm	42"	1065 mm	135/4
42"	1065 mm	48"	1219 mm	135/5
48"	1219 mm	54"	1370 mm	135/6
54"	1370 mm	60"	1523 mm	135/7
Lengthening Bar		36"	915 mm	L135/4

# RECORD® CLAMPS

## T-Bar Clamps

### 136 Series

- For the user who requires a more robust clamp for heavy-duty work which offers the facility of permanent fixing to workbench. RECORD T-bar clamps possess all the qualities of the 135 Series plus the following additional benefits:
- Bar manufactured from special T-bar section steel - robust extra resistance to bending in use
- Extra long head - strength and durability in use
- Range of five sizes plus lengthening bar offers the user clamping facilities from 42" to 126" (1065 mm – 3199 mm)

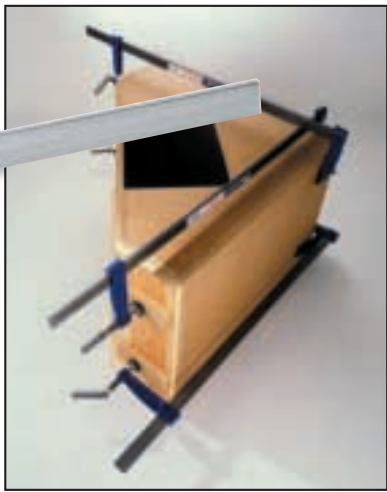


Capacity		Bar Length		Stock #
42"	1065 mm	48"	1219 mm	136/5
48"	1219 mm	54"	1370 mm	136/6
54"	1370 mm	60"	1523 mm	136/7
66"	1675 mm	72"	1827 mm	136/9
78"	1980 mm	84"	2132 mm	136/11
Lengthening Bar		48"	1219 mm	L136/6

## Speed Clamps

### 132 Series

- Drop handle operation allows for extra leverage. Trapezoidal thread helps provide longer life
- The double serrated high-quality steel bar gives more positive clamping
- Swivel shoe for positive location on uneven surfaces
- Fixed head and swivel shoe are fitted with removable plastic covers to protect delicate work



Capacity		Throat Depth		Stock #
4"	100 mm	4-3/4"	121 mm	132/10
6"	152 mm	4-3/4"	121 mm	132/15
8"	203 mm	4-3/4"	121 mm	132/20
12"	305 mm	4-3/4"	121 mm	132/30
16"	406 mm	4-3/4"	121 mm	132/40
20"	508 mm	4-3/4"	121 mm	132/50
24"	610 mm	4-3/4"	121 mm	132/60
32"	812 mm	4-3/4"	121 mm	132/80
40"	1015 mm	4-3/4"	121 mm	132/100
60"	1523 mm	4-3/4"	121 mm	132/150

# RECORD® CLAMPS

## Speed Clamps – Solid Handle

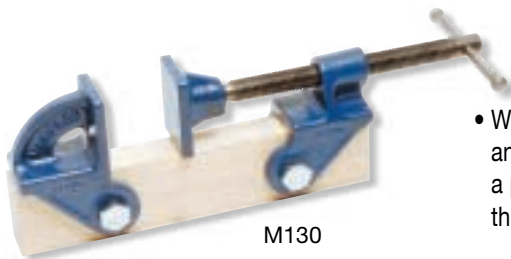
133 Series



133/60

- 133 Series Speed clamps are ideal for the workshop and home use, being fast acting and easy to use
- The solid steel bar is serrated top and bottom so that the sliding head locks firmly into position as soon as any pressure is applied and, with a throat depth of 4-3/4"/120 mm, you can clamp well in from the edge of the work
- The large octagonal handle gives you the grip to put plenty of pressure exactly where you need it. To protect delicate surfaces, removable plastic covers are supplied as standard for the fixed head and swivel shoe

Capacity		Throat Depth		Stock #
8"	203 mm	4-3/4"	121 mm	133/20
10"	254 mm	4-3/4"	121 mm	133/25
12"	305 mm	4-3/4"	121 mm	133/30
16"	406 mm	4-3/4"	121 mm	133/40
20"	508 mm	4-3/4"	121 mm	133/50
24"	610 mm	4-3/4"	121 mm	133/60
32"	812 mm	4-3/4"	121 mm	133/80
40"	1015 mm	4-3/4"	121 mm	133/100



M130

- With clamp heads, a bar clamp of any length can easily be made using a piece of finished wood 1" (25 mm) thick by 1-1/2" (38 mm) wide

## Clamp Heads

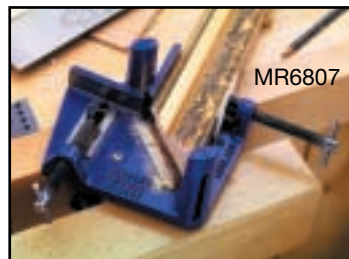
- Cast-iron head and slides, high-quality steel handle, screw and pin hardwearing long life
- Working slide principle incorporating large thrust surfaces – ensures high wear resistance and long life

Description	Stock #
1 Pair	M130



M140

M141



MR6807

## Corner/Miter Clamps

- Mitering demands accuracy, care and the best equipment. The RECORD corner and miter clamps are made to make miter cutting as simple as possible
- The MR6807 also features saw guides to provide 45° corners

Description	Capacity		Stock #
Corner Clamp	2"	50 mm	M140
Corner Clamp	4-1/4"	108 mm	M141
Miter Cutting Clamp	2" x 1-3/4"		MR6807
	50 mm x 45 mm		



# RECORD® WOODWORKING PLANES

*RECORD Planes have been perfected hand in hand with the art of handplaning over the past 90 years.*

- Manufactured to uncompromisingly high standards, designed to meet the demanding performance requirements of wood craftsmen
- Decades of experience with a combination of traditional, well proven designs and advanced production techniques have produced one of the finest range of woodworking planes on the market
- The traditional element is found in the fine grained gray iron body castings for strength and stability, classic and well balanced handle and knob for comfort and control, brass fittings and chrome lever cap
- Advanced production techniques are employed so that each and every RECORD plane looks as well as it works, and works as well as it looks

Exclusive tungsten vanadium steel cutting iron – specially formulated to take and hold a razor sharp edge even on the hardest of woods

Robust level cap designed to lock down on three pressure points for secure location of the cutting iron

Impact resistant ABS resin handle and knob for comfort and control

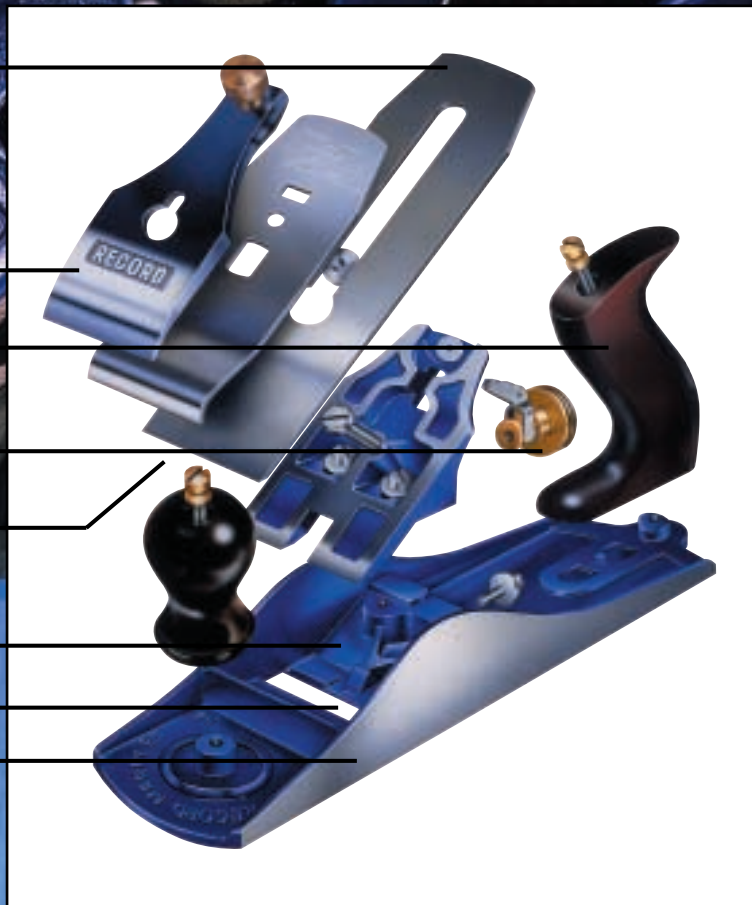
Traditional brass adjusting nut for fine setting

Cutting iron face is precision machined to lay flat on the frog face and eliminate chatter

CNC machined frog seating for smooth, accurate adjustment

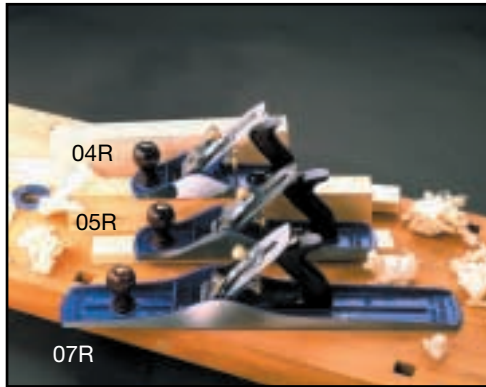
Precision, machine filed mouth

Cast fine grained gray iron body, CNC machined and accurate to +/- 1.5 thousandth on the base (1 thousandth is 1/40th of a millimeter)





# RECORD® WOODWORKING PLANES



There are basically three types of bench planes:

## **Smoothing Plane (04R)**

The most frequently purchase plane. Used for final finishing work. Ideal for general-purpose work

## **Jack Plane (05R)**

For the preliminary squaring of rough lumber. The general workhorse used for stock removal

## **Jointer Plane (07R)**

For removing the roughness and unevenness on long surfaces prior to smoothing

- The outstanding feature of every RECORD bench plane is the tungsten vanadium cutter. This unique composition of steel is proprietary to RECORD bench planes providing a razor-sharp edge, which holds longer even on the hardest woods
- Bench plane cutters are available in single and double iron as well as specialty plane irons

Body Length		Cutter Width		Stock #
9-3/4"	248 mm – Smooth	2"	50 mm	04R
14"	355 mm – Jack	2"	50 mm	05R
22"	558 mm – Jointer	2-3/8"	60 mm	07R



## Economy Bench Planes

- Have all essentials expected from a RECORD plane; tungsten vanadium cutting iron, high quality cast gray iron body with precision machined base
- Lever cap has three pressure points and a brass locking knob for secure location of cutting iron. Fine adjustment is achieved by brass adjusting nut and lateral adjusting lever
- Handle and knob are ergonomically designed for comfort and balanced control

Body Length		Cutter Width		Stock #
9-3/4"	248 mm – Smooth (DIY)	2"	50 mm	SP4
14"	355 mm – Jack (DIY)	2"	50 mm	SP5

# RECORD® WOODWORKING PLANES

## Block Planes

- RECORD Block Planes are a handy size for one-handed operation
- The plane iron in each model is set at a lower angle than other planes to help ensure efficient end grain planing. Also ideal for small-scale chamfering and planing jobs

**Features include:**

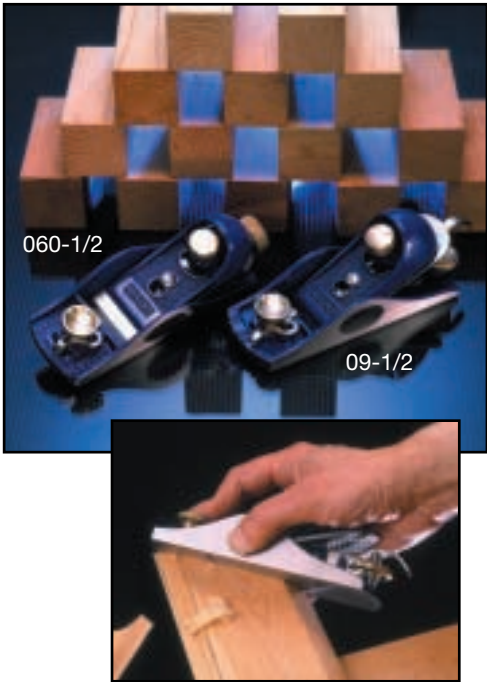
- Top quality carbon steel cutters keen honed edge
- Cast-iron bodies and lever caps – durable. Long lasting
- Precisely ground bases – accuracy and confidence in use
- Mouth adjustment for coarse or fine work

**060-1/2**

- Specially introduced to satisfy the demand for planing plastic laminates and other man-made composite materials. Cutter set at an angle of 12 1/2°. Fully adjustable for depth of cut. Screw-adjusted cutter held firmly in place by a lever and cam

**09-1/2**

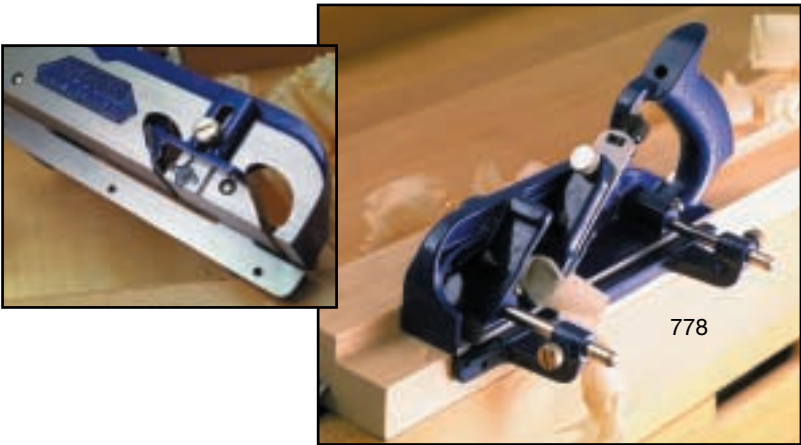
- Fully adjustable for depth of cut. Screw-adjusted cutter held firmly in place by a lever and cam. Lever for lateral blade adjustment



Body Length		Cutter Width		Cutter Angle	Stock #
6"	152 mm	1-5/8"	42 mm	12-1/2°	060-1/2
6"	152 mm	1-5/8"	42 mm	-	09-1/2

## Rabbet Plane

- Rabbet planes are generally used to form grooved joints in woodworking
- Designed for the user who prefers a more versatile plane. The plane cutters can be positioned in not just one, but two positions: the standard position for normal rabbeting work and forward position for planing into corners and difficult positions
- 2 cutter positions: rabbet or bull nose
- Chrome vanadium cutter
- Cast-iron body and fence
- Accurately ground base
- Fine thread depth-adjusting screw
- Supplied with adjustable fence
- Hardened steel spur



Body Length		Cutter Width		Stock #
8-1/2"	215 mm	1-1/2"	38 mm	778

# RECORD® WOODWORKING PLANES



- This plane is designed for use on concave and convex surfaces. Curvature of the flexible spring steel face is accurately set by means of a center screw adjustment

## Circular Plane

- The body is shaped to provide a comfortable grip at each end and the cutter is fully adjustable, being secured when set by a lever cap
- The body is a one piece gray iron casting, with adjustment and cutter setting identical to a normal bench plane

Body Length		Cutter Width		Stock #
10"	254 mm	1-3/4"	45 mm	020C



- A handy shaping tool for curved surfaces. Manufactured in two models:  
**A151** for convex curves  
**A151R** for concave curves

## Spoke Shaves

- The body is cast from malleable iron, and the tungsten vanadium cutter with lateral and vertical adjustment is secured by a lever cap and two retaining screws to eliminate chatter

Description		Cutter Width		Stock #
10"	254 mm – Convex	2-1/8"	54 mm	A151
10"	254 mm – Concave	2-1/8"	54 mm	A151R



- The cutting iron is the heart of a good plane. To produce the best results, the cutting iron must be accurately machined straight and true as well as made from a steel which will meet the demanding standards of the professional craftsman

## Plane Cutters

- In addition to the very high standards of accuracy maintained during manufacture, RECORD cutters have an edge on the competition, being made from a specially formulated tungsten vanadium steel which will take and hold a razor sharp edge even on the hardest woods. And because many of our cutters will fit other well-known makes of planes, even if you don't have a RECORD, you can still make the best of it with a RECORD tungsten vanadium cutter

Plane Cat No. Description	Single Iron Stock #	Double Iron w/ Cap Iron Stock #
03R / 020C	SI1-3/4	DI 1-3/4
04R / 05R	SI2	DI 2
04-1/2, 05-1/2, 06, 07R	SI2-3/8	DI 2-3/8
08	SI2-5/8	–

Note: 03, 04-1/2, 05-1/2, 06, 08 are old RECORD catalog nos.

Plane Cat No. Description	Stock #
0220, 09-1/2, 060-1/2, 0120	0220-D
073	073-C
0110	0110-D
778	778-D
A151, A151R	A151-B

Note: 0220, 0120, 073, 0110, 778 are old RECORD catalog nos.

## Specialty Irons



# RECORD® BOLT CUTTERS

*RECORD Bolt Cutters have established a reputation which few have equaled and none have surpassed.*

- Manufactured with our own steel – a proprietary formula – RECORD Bolt Cutter Jaws can withstand the pressure
- After drop forging and machining, the jaws are specially heat treated, producing differential hardness values that lend resilience to the body of the jaw and penetrating rigidity to the cutting edge, a process that is precisely balanced to prevent brittleness
- They come in a range of sizes and capacities made with care and skill for you to use with confidence
- Select the right bolt cutter for the job –
  - General Purpose Center Cut
  - High Tensile Center Cut
  - Clipper Cut
  - End Cut





# RECORD® BOLT CUTTERS

RECORD® Bolt Cutter Selection Chart						Diameter of Material to be Cut								
Stock #	Overall Length		High Tensile	Type of Cut	Adjustment	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"
	inches	mm				5 mm	6 mm	8 mm	10 mm	11 mm	13 mm	14 mm	16 mm	19 mm
BC918H	18	457	X	Center	Cam									
BC924H	24	610	X	Center	Cam									
930H	30	761	X	Center	Arm									
936H	36	915	X	Center	Arm									
942H	42	1065	X	Center	Arm									
BC914	14	355		Center	Cam									
BC918	18	457		Center	Cam									
BC924	24	610		Center	Cam									
930	30	761		Center	Arm									
936	36	915		Center	Arm									
942	42	1065		Center	Arm									
BC914F	14	355		Clipper	Cam									
BC918F	18	457		Clipper	Cam									
BC924F	24	610		Clipper	Cam									
930F	30	761		Clipper	Arm									
936F	36	915		Clipper	Arm									
942F	42	1065		Clipper	Arm									
BC924E	24	610		End	Cam									

## Materials

### High Tensile

Tensile Strength: up to 112 tons / in<sup>2</sup>

Concrete Reinforced Rod and Mesh  
Reinforced Wire  
High Tensile steel Rod and Bar  
Case Hardened Chain  
Cool Drawn Alloy Steel  
Tempered Spring Wire

### Medium Tensile

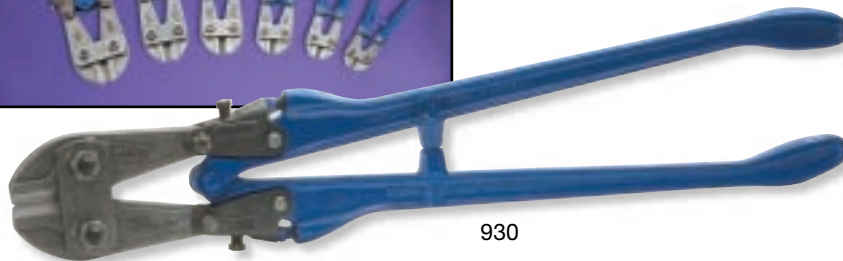
Tensile Strength: up to 80 tons / in<sup>2</sup>

Non Ferrous Bolts, Rod and Bar  
Medium Tensile Annealed Tool Steel Rod and Bar  
Medium Tensile and Mild Steel Bolts  
Medium Tensile and Mild Steel Rod and Bar  
Medium Tensile Single Strand Wire

### Low Tensile

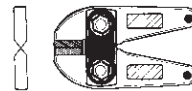
Tensile Strength: up to 45 tons / in<sup>2</sup>

Non Ferrous Bolts, Rod and Bar  
Annealed Tool Steel Rod and Bar  
Mild Steel Bolts, Rod and Bar  
Low Tensile Single Strand Wire



930

## Heavy-Duty Bolt Cutters Center Cut — General Purpose



- Recommended for maximum material hardness and tensile strength – Brinell 370, Rockwell C40, 80 tons/in<sup>2</sup> (125kg/mm<sup>2</sup>)
- Center cut jaws have the strongest form of cutting edge for general use
- Used for cutting bolts and rods, annealed tool steel rods, non-ferrous metals, single stranded wire in various forms, general mild steel rods, synthetic materials in rod, bar and strip

Overall Length		Soft Steel Rod Diameter		Medium Tensile Diameter		Stock #
14"	355 mm	5/16"	8 mm	1/4"	6 mm	BC914
18"	457 mm	3/8"	10 mm	5/16"	8 mm	BC918
24"	610 mm	7/16"	11 mm	3/8"	10 mm	BC924
30"	761 mm	9/16"	14 mm	1/2"	13 mm	930
36"	915 mm	5/8"	16 mm	9/16"	14 mm	936
42"	1065 mm	3/4"	19 mm	5/8"	16 mm	942

### Materials:

*Jaws*, special tool steel, forged, machined and heat-treated under strict control

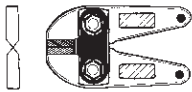
*Straps*, precision ground heat-treated steel

*Handles*, drop-forged steel

# RECORD® BOLT CUTTERS

## Heavy-Duty Bolt Cutters Center Cut — High Tensile

- Recommended for maximum material hardness and tensile strength – Brinell 500, Rockwell C52, 110 tons/in<sup>2</sup> (170 kg/mm<sup>2</sup>)
- High tensile jaws are heat-treated for cutting hard materials. They have the center cut feature and a short nose
- Easier cutting of prestressed concrete reinforcing rods, mesh and wire, high tensile steel rods, bolts and case-hardened chain, cold drawn alloy steel and tempered spring wire



BC924H

Overall Length		Steel Rod Medium Tensile Diameter		Steel Rod High Tensile Diameter		Stock #
18"	457 mm	5/16"	8 mm	1/4"	6 mm	BC918H
24"	610 mm	3/8"	10 mm	5/16"	8 mm	BC924H
30"	761 mm	7/16"	11 mm	3/8"	10 mm	930H
36"	915 mm	1/2"	13 mm	7/16"	11 mm	936H
42"	1065 mm	9/16"	14 mm	1/2"	13 mm	942H

**Materials:**

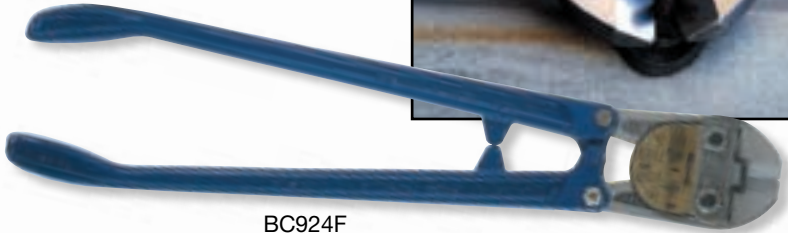
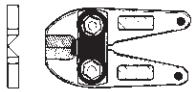
*Jaws*, special tool steel, forged, machined and heat-treated under strict control

*Straps*, precision ground heat-treated steel

*Handles*, drop-forged steel

## Heavy-Duty Bolt Cutters Close Cutting — Clipper Cut

- Recommended for maximum tensile strength 45 tons/in<sup>2</sup> (70 kg/mm<sup>2</sup>)
- The clipper cut is essential where bolts have to be close cut. Typical examples are trimming protruding bolts or removal of rusted nuts in demolition work. Suitable for mild steel bolts, rods, non-ferrous metals and synthetic materials



BC924F

Overall Length		Maximum Bolt Cutting Diameter		Maximum Steel Rod Diameter		Stock #
14"	355 mm	5/16"	8 mm	1/4"	6 mm	BC914F
18"	457 mm	3/8"	10 mm	5/16"	8 mm	BC918F
24"	610 mm	7/16"	11 mm	3/8"	10 mm	BC924F
30"	761 mm	9/16"	14 mm	1/2"	13 mm	930F
36"	915 mm	5/8"	16 mm	9/16"	14 mm	936F
42"	1065 mm	3/4"	19 mm	5/8"	16 mm	942F

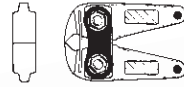
**Materials:**

*Jaws*, special tool steel, forged, machined and heat-treated under strict control

*Straps*, precision ground heat-treated steel

*Handles*, drop-forged steel

# RECORD® BOLT CUTTERS



## Heavy-Duty Bolt Cutter Close Cutting — End Cut

- Recommended for maximum tensile strength 45 tons/in<sup>2</sup> (70 kg/mm<sup>2</sup>)
- End cut is ideal for close cutting in confined spaces. Suitable for mild steel bolts, rod, nonferrous metals and synthetic materials

BC924E

Overall Length		Maximum Bolt Cutting Diameter		Maximum Steel Rod Diameter		Stock #
24"	610 mm	7/16"	11 mm	3/8"	10 mm	BC924E

## Replacement Jaws and Heads

### Replacement

- When existing jaws or heads become worn we recommend replacement of the complete head. As these are correctly assembled as a unit within our factory, fitting a

complete head rivals "as new" performance and significantly reduces fitting time. Separate jaws only are available if required

### Conversion

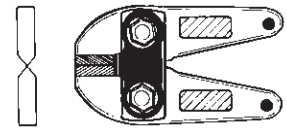
- Since all heads are interchangeable within the same size of bolt cutter, including new BC series, it is possible to convert, by substituting the appropriate head

Bolt Cutter Size		Description	Fits Bolt Cutter Stock #		Jaw Stock #	Head Stock #
14"	355 mm	General Purpose	BC914	BC914F	J914	H914
18"	457 mm	High Tensile	BC918	BC918H BC918F	J918H	H918H
24"	610 mm	High Tensile	BC924	BC924H BC924F BC924E	J924H	H924H
30"	761 mm	High Tensile	930	930H 930F	J930H	H930H
36"	915 mm	High Tensile	936	936H 936F	J936H	H936H
42"	1065 mm	High Tensile	942	942H 942F	J942H	H942H

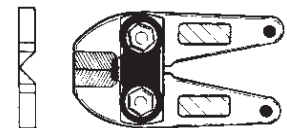
Bolt Cutter Size		Fits Bolt Cutter Stock #		Jaw Stock #	Head Stock #
14"	355 mm	BC914	BC914F	J914F	H914F
18"	457 mm	BC918	BC918H BC918F	J918F	H918F
24"	610 mm	BC924	BC924H BC924F BC924E	J924F	H924F
30"	761 mm	930	930H 930F	J930F	H930F
36"	915 mm	936	936H 936F	J936F	H936F
42"	1065 mm	942	942H 942F	J942F	H942F

Bolt Cutter Size		Fits Bolt Cutter Stock #		Jaw Stock #	Head Stock #
24"	610 mm	BC924	BC924F BC924H BC924E	J924E	H924E

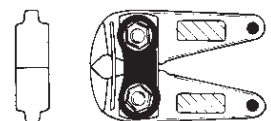
## Center Cut



## Clipper Cut



## End Cut



# RECORD® PIPE TOOLS

*RECORD is one of the largest manufacturers of pipe tools. Large industrial users regularly specify RECORD Pipe Tools.*

- Pipe wrenches are hand tools designed to withstand the maximum leverage that any one person can generate. Even though we include a generous margin of safety, hammering or levering the handle can cause a dangerous, instantaneous failure. Do not hammer or lever the handle
- Pipe cutters are used on steel or cast iron pipe. For copper, brass or aluminum pipe you would use a Tube Cutter
- Hinged pipe vises are substantially strengthened in the load-bearing areas of the main frame and base to provide the resistance to arduous usage demanded by pipe fitters

Vises, Clamps, Pipe Tools, Pipes and Bolt Cutters

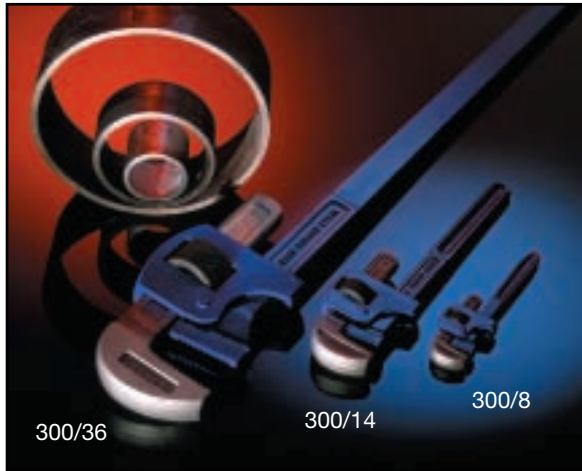




# RECORD® PIPE TOOLS

## Stillson Pipe Wrenches

300 Series



- The Stillson wrench has three essential load bearing components: handles, hook jaws and adjusting nut. All these are made of steel. As pressure is increased on the handle, the jaws put more bite on the pipe. Depending on size, the jaw teeth are flame hardened or induction hardened and air tempered. This adjusting nut is also hardened and tempered

Overall Length When Open		Open Pipe Capacity		Stock #
8"	203 mm	3/4"	19 mm	300/8
10"	254 mm	1"	25 mm	300/10
12"	305 mm	1-1/4"	32 mm	300/12
14"	355 mm	1-1/2"	38 mm	300/14
18"	457 mm	2"	50 mm	300/18
24"	610 mm	2-1/2"	64 mm	300/24
36"	915 mm	3-1/2"	90 mm	300/36



## "Leader" Heavy-Duty Pipe Wrenches

350 Series

- This heavy-duty wrench is used extensively in the oil, gas and civil engineering industries
- Unlike the Stillson, the frame and handle are a one piece ductile iron casting
- Both jaws of a "Leader" are replaceable and made from drop forged steel. The teeth are hardened and tempered to resist wear and distortion
- The adjusting nut is also hardened and tempered. Although the "Leader" is heavier than the Stillson, it is much stronger and, size for size, has a larger capacity

Overall Length When Open		Pipe Capacity		Stock #
8"	203 mm	1"	25 mm	350/8
10"	254 mm	1-1/2"	38 mm	350/10
12"	305 mm	2"	50 mm	350/12
14"	355 mm	2"	50 mm	350/14
18"	457 mm	2-1/2"	64 mm	350/18
24"	610 mm	3"	75 mm	350/24
36"	915 mm	5"	127 mm	350/36
48"	1219 mm	6"	152 mm	350/48

### Materials:

*Handle*, high grade S.G. castings

*Jaws*, drop-forged high-quality steel to a very close specification. Specially heat-treated to ensure resistance to distortion or breakage

*Nut*, heat-treated steel

# RECORD® PIPE TOOLS

## Chain Pipe Wrenches

- The robust construction of the standard pattern provides maximum grip on round or irregular shapes
- The chain wrench is essential when turning pipes in close proximity or where they are close to a wall or located in a trench
- Jaws made from drop-forged steel then hardened and tempered
- Handle is tubular steel attached to solid ductile iron castings



### Features:

- *Jaws*, double ended, reversible and renewable
- *Teeth*, accurately profiled and heat treated; provides instant grip without slip
- *Chain/connecting links*, made from high tensile steel for added durability
- *Handles*, high grade S.G. ductile steel and tubular construction, strength and lightness
- *Capacity*, clearly marked on jaw plates

Pipe Capacity O.D.		Overall Length		Chain Breaking Strain		Stock #
1/2" – 4"	13 mm – 100 mm	36-1/2"	926 mm	9,800 lbs	4,450 kgs	233C
1" – 8"	25 mm – 203 mm	51"	1295 mm	14,300 lbs	6,490 kgs	234C
2" – 18"	50 mm – 457 mm	88-1/2"	2246 mm	21,800 lbs	9,890 kgs	236C

## Handi Wrench

- The Handi Wrench is an extremely versatile, lightweight wrench which can be used on round, square, hexagonal or irregular shapes and fittings up to 4" (100 mm) diameter
- The drop-forged steel handle has carefully profiled and hardened integral teeth. The design enables the fitting to be turned in either direction without removing the tool from the work
- The Handi Wrench can be used for a wide range of applications – oil filters for car engines, immersion heaters, plumbing and heating installations. The short handle in relation to its large capacity makes it invaluable for use in confined spaces



Capacity O.D.		Overall Length		Stock #
4"	100 mm	13"	330 mm	240

## Tube Cutters

- These tools are specifically designed for the fast cutting of thin-wall tube in copper, brass or aluminum and thin-wall steel conduit
- These compact and accurate cutters have steel wheels and rollers mounted in precision die-cast bodies
- Cutting capacity - suitable for popular domestic sizes of tubing
- Die cast body and saddle - strong, yet light and effortless in use
- Wide rollers - provide a square cut
- Grooved rollers - enables close cutting
- Specially hardened thin section steel cutting wheel
- Stove-enameled finish

### 200-30C Features Only

- Fold away de-burrer – safely stowed away when not in use
- Spare cutting wheel in handle – saves on replacement time



Capacity O.D.		Overall Length		Stock #
1/8" – 7/8"	3 mm – 22 mm	2"	50 mm	200-22
1/8" – 1-1/8"	3 mm – 29 mm	6"	152 mm	200-30C
9/16" – 1-3/4"	14 mm – 45 mm	7-1/2"	190 mm	200-45

# RECORD® PIPE TOOLS

## Pipe Cutters

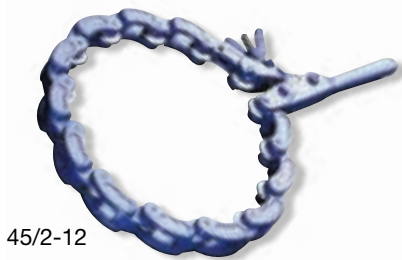
- Accurate cutting depends on the wheels following exactly the same line around the pipe on each sweep. This “tracking” is checked on every cutter before leaving the factory
- Steel mainscrews, wheels and rollers combined with S.G. ductile iron bodies and slides make RECORD Pipe Cutters tough and reliable. See product warranty for details
- Pipe Cutters are used for the cutting of steel and cast iron pipe. For cutting steel they are fitted with fast cutting precision made wheels of specially heat-treated high grade steel
- Wide rollers – square cutting every time
- High-quality body, slide & handle castings – guaranteed against breakage, offer long life, and are strong yet light in use
- Special hardened thin section steel cutting wheel – produces fast cutting action
- Stove-enameled finish – rust resistant
- Capacity marked on the body
- For copper, brass or aluminum pipe use a Tube Cutter



Capacity O.D.		Stock #
1/8" – 2"	3 mm – 50 mm	202R
1" – 3"	25 mm – 75 mm	203R
2" – 4"	50 mm – 100 mm	204R



Capacity O.D.		Stock #
1/2" – 2"	13 mm – 50 mm	102
1-1/2" – 3"	38 mm – 75 mm	103



- This pattern of cutter is specifically for use on cast-iron pipes, particularly in trenches where space is restricted and with minimum disturbance

Capacity O.D.	Approximate Outside Diameter	Number of Wheels	Stock #
2" – 12"	2-9/16" – 13-5/8"	14	45/2-12
50 mm – 305 mm	65 mm – 346 mm		

## Roller Pipe Cutters

- The finest cutter of its type for use on steel pipe, it has one fast cutting wheel and two rollers
- These rollers ensure that the cutter is set and kept square to the pipe, and also roll down the burr
- The design of the handle and head incorporates a safety stop to help prevent the cutting wheel from being damaged by the rollers

## 3-Wheel Pipe Cutters

- For steel pipe, this pattern is used where it is not possible to rotate the tool completely around the pipe, as each of the three wheels covers one third of the complete cutting arc

## Link Pipe Cutter

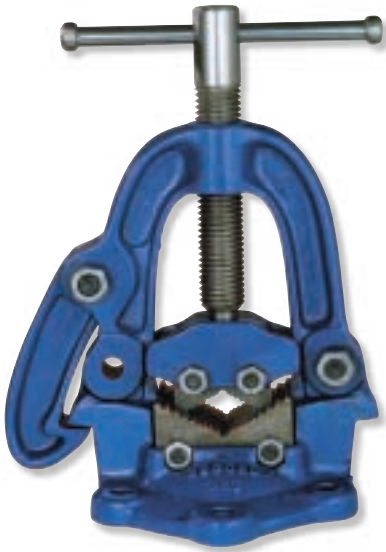
- Cast-iron pipes are often irregular in shape and the self-adjusting linkage allows the cutting wheels to ride over such surfaces and continue to cut
- The handle, fork unit and links are manufactured from high grade castings. The wheels are manufactured from tool steel which is accurately heat-treated to help ensure long life



# RECORD® PIPE TOOLS

## Hinged Pipe Vises

- The single “V” jaw in the frame moves between the two “V” jaws in the base, allowing even the smallest size of pipe to be gripped securely
- The base is provided with three holes for fastening to a bench, post or tripod stand. All cast components are stove-enamel finished for rust resistance
- Jaws are accurately profiled and heat-treated in quality tool steel to give trouble-free service
- Frame is self-locking and reversible for right or left-hand operation



92C

Capacity O.D.		Stock #
1/8" – 2"	3 mm – 50 mm	92C
1/8" – 2-1/2"	3 mm – 64 mm	92-1/2C
1/8" – 3-1/2"	3 mm – 90 mm	93-1/2C

## Chain Pipe Vises

- These vises are compact, portable and easily fixed to a bench, post or tripod stand
- Body – the castings are made from S.G. Ductile iron for added strength and durability
- Jaw – drop-forged steel, accurately machined and heat-treated
- Chain – of high tensile steel – provides additional “all round” grip assuring safety in use
- Nut and handle provide positive adjustment to chain; assists rapid and secure holding of workpiece
- Stove-enamelled finish



182C

Capacity O.D.		Stock #
1/8" – 2"	3 mm – 50 mm	181C
1/4" – 4"	6 mm – 100 mm	182C
1/2" – 8"	13 mm – 203 mm	183C/8

# RECORD® PIPE TOOLS

## Tripod Stands



- The basic tripod stand (TS10) features a hinged tray for holding accessories. The fold-down platform provides a firm foot-hold; using the worker's own weight creating a stable work station. Available with pipe vises

- These portable, folding units are ideal for use on site and in work-shops where space is limited
- The vise platform is drilled to receive either a chain vise or hinged pipe vise. Stove-enameled finish for rust resistance

Description	Stock #
Stand Only	TS10
TS10 + 182C	582
TS10 + 92C	592
TS10 + 92-1/2C	592-1/2



### Mini-Bender 210R

- Calibrated for 90° and return bends in annealed copper, steel, aluminum and stainless steel
- The extensive use of small bore tubing in engineering and domestic environments calls for compact lightweight benders that are easy and accurate to use

### Mini-Bender 211R

- Ideal for "microbor" central heating systems. Accurately calibrated for left hand, right hand or offset bends in copper, brass, aluminum or steel
- These benders are made from strong precision die-castings with integral formers and guides – so there are no loose components to worry about
- Each will bend three sizes of copper, brass, aluminum or steel tube



Capacity O.D.	Length	Stock #
1/8", 3/16", 1/4" 3 mm, 5 mm, 6 mm	5-1/2" 140 mm	210R
1/4", 5/16", 3/8" 6 mm, 8 mm, 10 mm	8-1/2" 215 mm	211R

# RECORD® STANDS

## Roller Stand

- Collapsibility – whether working in limited workshop space, or on site from the back of a truck, the ability to fold away and maximize working space is critical - the RPR400S folds away to 27" high x 3" wide (685 mm x 75 mm)
- Stability – by incorporating four non-slip rubber feet the RPR400S is rigid in use even when working on low friction floor surfaces
- Weight Bearing Load – tested to a massive weight load of 230 lbs (105 kg) the 2" (50 mm) diameter steel roller will work tirelessly all day on lumber and plastics up to 150 lbs (68.04 kg) without stressing or deflection
- Height Locking – on most manufacturers' rollerstands, the locking lever to secure the height of the stand is vertical to the roller. When heavy pressure is exerted on the roller it transmits directly onto the lever and can cause the roller to drop in height



RPR400S

Description	Roller Width	Maximum Height	Minimum Height	Stock #
Boxed	11-3/8" 289 mm	40" 1015 mm	20" 508 mm	RPR400S
Boxed, 5 pcs	11-3/8" 289 mm	40" 1015 mm	20" 508 mm	RPR400-5
Unboxed, 50/crate	11-3/8" 289 mm	40" 1015 mm	20" 508 mm	RPR400U

## Ball Transfer Stand

- Features:**
- Six independent swivel balls
  - Workpiece can move in any direction – large sheets of material can easily be handled
  - Fully collapsible; folds to 3" wide
  - Four non-slip rubber feet grip floor without cutting into floor surface
  - Main roller carrier is at an angle to locking knob; reducing tendency to height drop



RPT600



RPB600

Description	Roller Width	Maximum Height	Minimum Height	Stock #
Head ONLY	12-1/4" 311 mm	–	–	RPT600
With Stand	12-1/4" 311 mm	41-1/4" 1047 mm	25-5/8" 650 mm	RPB600

## Metal Work Stand

- Features:**
- Heavy-duty construction
  - Adjustable height – 30" to 33" (761 mm to 838 mm)
  - Legs can be secured to floor
  - Load bearing weight = 750 lb (Using 3/4" plywood as table top)
  - Table top dimension – 20-3/8" x 18-3/8" (517 mm x 466 mm)



6901-65

Description	Stock #
Metal Work Stand	6901-65



# Chisels

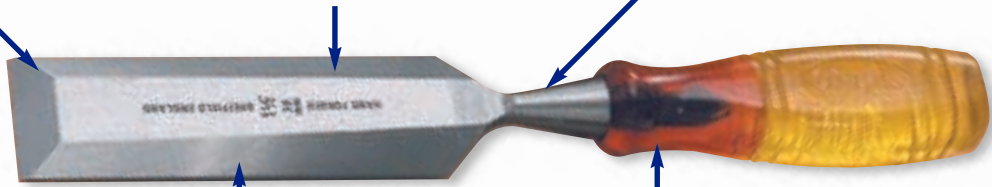
Chisels

Gauges



# MARPLES® CHISELS

- Extra annealing creates an even carbide distribution for a hard to blunt, easy to sharpen edge
- Hardened and tempered up to the last 1" / 25 mm for a long working life
- Sturdy neck and bolster for strength and shock absorption
- One piece forging for strength and resilience
- Large strong tang keeps the handle firmly attached



M373/1-1/2

Some chisel manufacturers produce their blades in two pieces, welding the tang to the blade after forging. MARPLES Chisel blades, by contrast, are solid, one piece forgings from tip to tang, giving them complete structural integrity

Put very simply, a chisel blade is created by heating a bar of carbon rich steel to 1200°C and forging it

into shape under a 500 kg, pneumatic hammer. It is then trimmed, hardened, tempered, tested, ground and sharpened ready for use

An additional annealing process is applied, which ensures that the carbide in the steel is smoothly distributed throughout the body of the blade. This produces a cutting edge which is slow to blunt yet easy to re-sharpen

All blades are hardened and tempered up to the last 1" / 25 mm. You can literally re-sharpen it up to the last inch, extending its useful working life and giving you more value for your money

## "Splitproof" Bevel Edge Chisels

### "Splitproof" Handles

The shape of the cellulose acetate butyrate handle is designed for firm gripping for robust work but is equally suitable for light delicate jobs. Guaranteed "Splitproof", this handle is virtually indestructible. Can be struck with a hammer. Ideal for the construction worker



M373

### Bevel Edge

Originally developed for fine cabinet work, dovetailing and chiselling where clean cuts in angled corners are necessary. Now the most popular blade

Blade Width	Bulk Stock #
1/8"	M373/-1/8
1/4"	M373/-1/4
3/8"	M373/-3/8
1/2"	M373/-1/2
5/8"	M373/-5/8
3/4"	M373/-3/4
1"	M373/1
1-1/4"	M373/1-1/4
1-1/2"	M373/1-1/2
2"	M373/2
1/4", 1/2", 3/4", 1" - Set of 4	M373/S4
1/4", 3/8", 1/2", 3/4", 1" - Set of 5	M373/S5
1/4", 3/8", 1/2", 3/4", 1", 1-1/4" - Boxed - Set of 6	M373/SB6
Chisel Set "Splitproof" w/ Denim Roll 11 pcs	M373/LR11
Chisel Set "Splitproof" w/ Leather Roll 11 pcs	M373/R11



# MARPLES® CHISELS

## BLUE CHIP® Bevel Edge Chisels



M444



M444/S3

### Blue Chip Handles

This handle style is the most popular. The "rounded square" cross section fits comfortably in the hand making the chisel easy to control regardless of the angle of the blade

### Bevel Edge

The Bevel Edge is now the most popular type of general purpose chisel. It is used for chamfering, dovetailing and making clean cuts in tight corners where a firmer chisel would jam



M444/SB6

Blade Width	Bulk Stock #
1/8"	M444/-1/8
1/4"	M444/-1/4
3/8"	M444/-3/8
1/2"	M444/-1/2
5/8"	M444/-5/8
3/4"	M444/-3/4
1"	M444/1
1-1/4"	M444/1-1/4
1-1/2"	M444/1-1/2
2"	M444/2
1/2", 3/4", 1" - Set of 3	M444/S3
1/4", 1/2", 3/4", 1" - Set of 4	M444/S4
1/4", 3/8", 1/2", 3/4", 1" - Set of 5	M444/S5
1/4", 3/8", 1/2", 5/8", 3/4", 1" - Boxed - Set of 6	M444/SB6



M313

## "Splitproof" Firmer Chisels

### "Splitproof" Handles

Designed to absorb repeated hammer blows. The "Splitproof" handle is ideal for all types of hard demanding woodwork in the shop or on the building site. If you break a "Splitproof" handle, the complete chisel will be replaced. The shape of the cellulose acetate butyrate

handle is designed for firm gripping for robust work but is equally suitable for light delicate jobs

### Firmer

The original shape blade is particularly useful for rough and heavy work and especially the cutting of housing joints or grooves, where it is important to keep an edge of 90 degrees

- Designed for heavier work than the bevel edge. This includes grooving with 90° edges or, any situation where undercutting needs to be avoided

Blade Width	Bulk Stock #
1/4"	M313/-1/4
3/8"	M313/-3/8
1/2"	M313/-1/2
5/8"	M313/-5/8
3/4"	M313/-3/4
1"	M313/1
1-1/4"	M313/1-1/4
1/4", 1/2", 3/4", 1"	M313/S4



# MARPLES® CHISELS

## BLUE CHIP® Firmer Chisels

### Blue Chip Handles

Slightly squared the special polypropylene handle gives a comfortable grip for continuous use with minimal fatigue. Designed for use with a mallet but can be occasionally struck with a hammer. Our most popular handle style

### Firmer

The Firmer blade many years ago was the only chisel that could be purchased. Today this strong, thick blade with its deep straight sides is used for heavy roughing-out and grooving



Blade Width	Bulk Stock #
1/4"	M333/-1/4
3/8"	M333/-3/8
1/2"	M333/-1/2
5/8"	M333/-5/8
3/4"	M333/-3/4
1"	M333/1
1/4", 1/2", 3/4", 1" - Set of 4	M333/S4

## Boxwood Bevel Edge Chisels

### Boxwood Handles

All boxwood used for MARPLES chisels is plantation grown. The even, close grain and light coloring gives the handle its attractive appearance and great feel. The sturdy brass ferrule helps prevent the durable handle from splitting. It has the traditional carver shape. A wooden mallet is the recommended striking tool

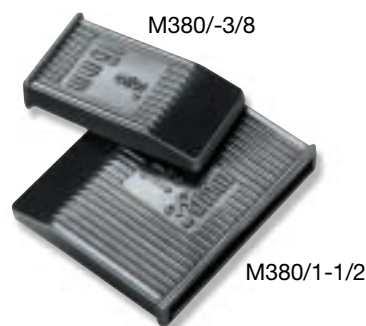
### Bevel Edge

Now the most popular blade, it was originally designed for fine cabinet work. Used for dovetailing and chiseling where clean cuts in angled corners are necessary, it won't jam like a firmer chisel



Blade Width	Bulk Stock #
1/8"	M377/-1/8
1/4"	M377/-1/4
3/8"	M377/-3/8
1/2"	M377/-1/2
5/8"	M377/-5/8
3/4"	M377/-3/4
1"	M377/1
1-1/4"	M377/1-1/4
1-1/2"	M377/1-1/2
2"	M377/2

# MARPLES® CHISELS AND CARVING TOOLS



## Chisel Guards

- To protect the cutting edge and keep your chisel safe, chisel guards are available for all bevel edge and firmer chisels up to 1-1/2" blade width

Blade Width	Bulk Stock #
1/8"	M380/-1/8
1/4"	M380/-1/4
3/8"	M380/-3/8
1/2"	M380/-1/2
5/8"	M380/-5/8
3/4"	M380/-3/4
7/8"	M380/-7/8
1"	M380/1
1-1/4"	M380/1-1/4
1-1/2"	M380/1-1/2



## Mallets

### Carvers Mallet

Well balanced mallet with round beechwood head to provide constant striking surface and ash handle to absorb shock. Head diameter is 4"

### Joiners Mallet

Constructed of beechwood head and ash shaft

Description	Bulk Stock #
Joiners Mallets	MR7715
Carving and Sculpting Mallet	M204

## Leather Chisel Roll

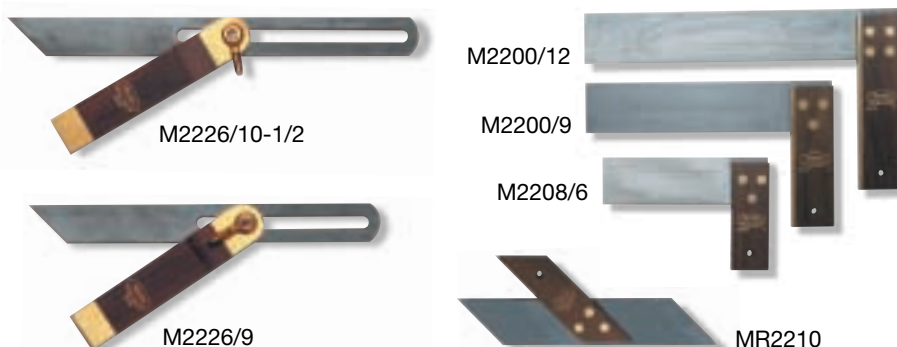
- The leather roll is a fine accessory for holding/storing your MARPLES chisel set. This is constructed of durable leather and can hold a complete set of chisels. Eleven chisels in all

Description	Bulk Stock #
Leather Roll w/o Chisels	10-456

# MARPLES® GAUGES AND CARVING TOOLS

## Squares & Bevels

- All MARPLES squares are tested three times for accuracy. Blades are made of hardened steel and secured by three steel washers with brass rivets. The handles are made of MARPLES plantation grown rose-wood providing not only high quality but also a visible expression of superiority of MARPLES products



Description	Bulk Stock #
6" Tri-Square; Deluxe Brass Face	M2200/6
9" Tri-Square; Deluxe Brass Face	M2200/9
12" Tri-Square; Deluxe Brass Face	M2200/12
6" Tri-Square	MR2208/6
9" Tri-Square	MR2208/9
10" Miter Square	MR2210
9" Sliding Bevel	MR2226/9
10-1/2" Sliding Bevel	M2226/10-1/2

## Gauges

- MARPLES gauges are fitted with hardened steel spurs. The hole in the stock is carefully broached to match the stem's contour, and, (with the exception of the MR2049) the gauges are fitted with a polyester friction pad between the thumb screw and stem to ensure a smooth sliding action



Description	Bulk Stock #
Marking Gauge; Economy w/ Plastic Thumbscrew	MR2049
Marking Gauge; Deluxe Brass Thumbscrew, Brass Facing	M2050
Cutting Gauge; Hardened Steel Blade	M2083
Mortice & Marking Gauge; Single Spur Top, Double Spur Base, Brass Slide	M2153
Mortice & Marking Gauge; Deluxe; Adjusted Slide and Brass Facing	M2154

## Cabinet Scrapers

- The cabinet scraper removes fine shavings from wood giving a very smooth finish. Unlike an abrasive, it does not produce dust which can clog the grain. The scrapers are made from hardened, tempered and polished carbon tool steel
- They can be easily sharpened with a file



Description	Bulk Stock #
5" x 2-1/2" Rectangle	M2450
6" x 3" Rectangle	M2451
Gooseneck	M2452
Hollow	M2453
4 pc Set	M2454/S4



# ***Snips***

**Aviation Snips**

**Utility Snips**

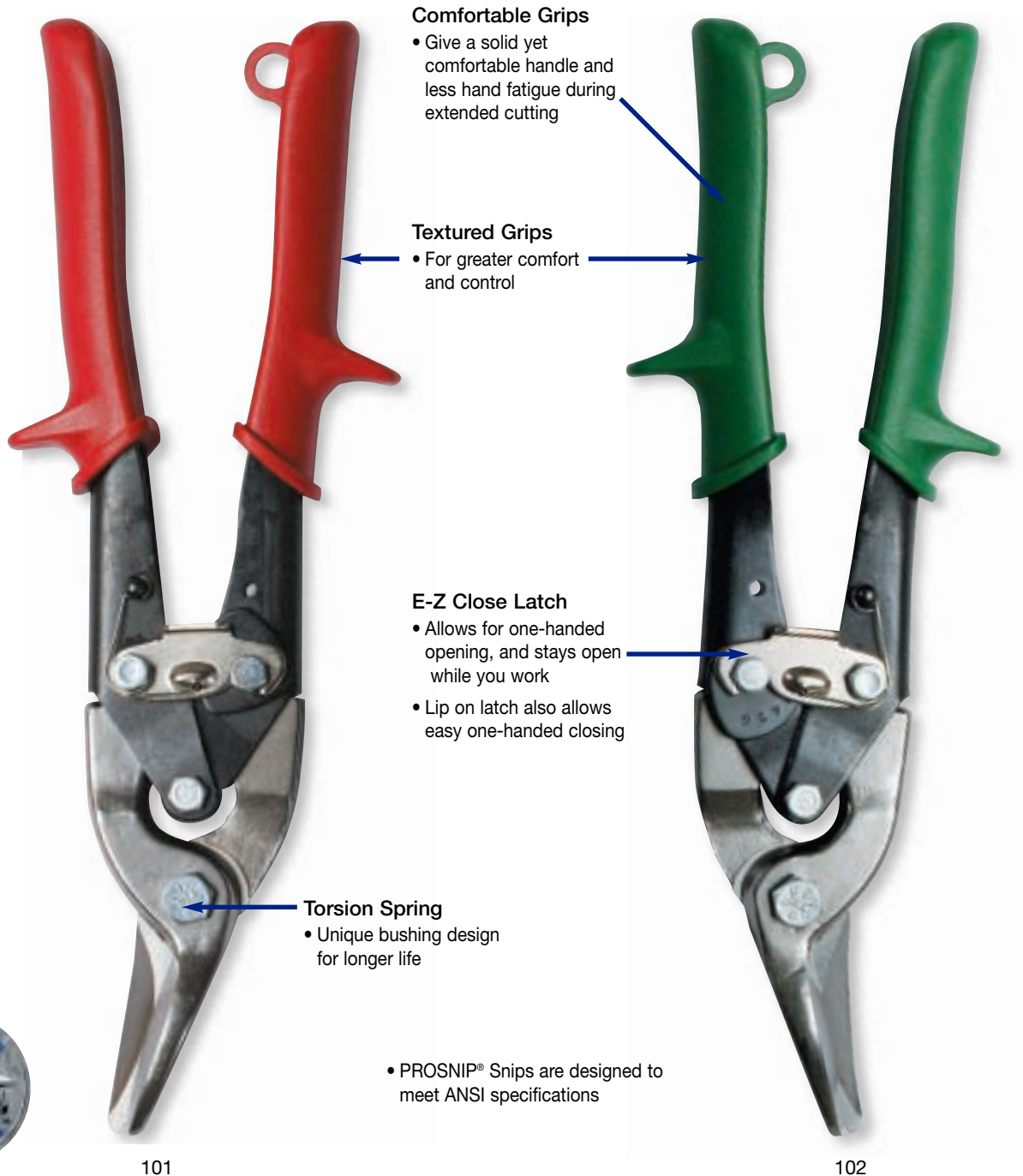
**Offset Snips**

**Tinner Snips**



# PROSNIP® AVIATION SNIPS

Snips



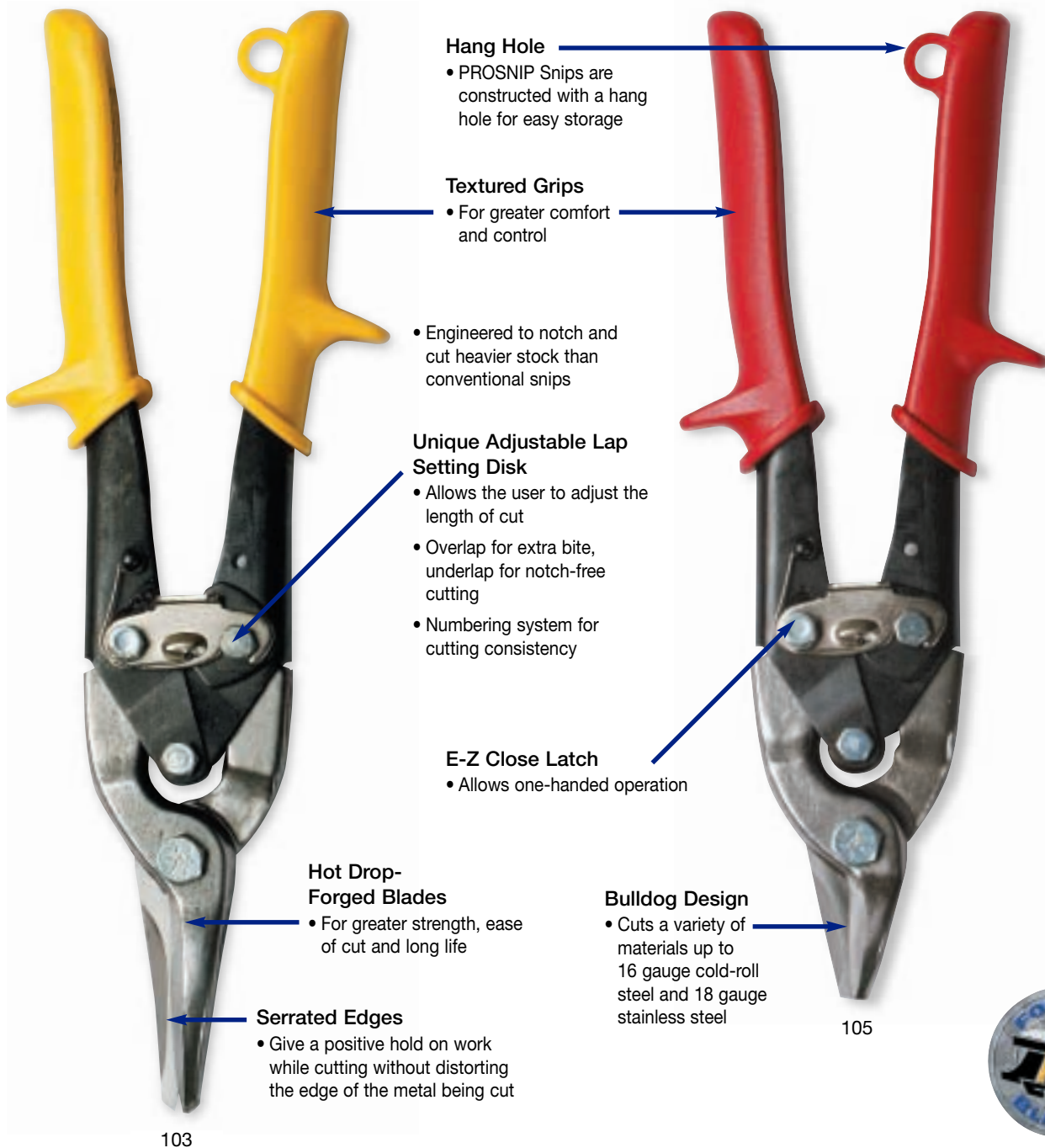
## Aviation Snips, Compound Leverage

Description	Size	Length of Cut	Grip Color	Maximum Cold-Roll Steel	Cutting Capacity Stainless Steel	Carded Stock #
101 Cuts Left and Straight	10" / 250 mm	1-3/16" / 30 mm	Red	18 ga / 1.19 mm	22 ga / .84 mm	21001
102 Cuts Right and Straight	10" / 250 mm	1-3/16" / 30 mm	Green	18 ga / 1.19 mm	22 ga / .84 mm	21002





# PROSNIP® AVIATION SNIPS



## Aviation Snips, Compound Leverage

Description	Size	Length of Cut	Grip Color	Maximum Cold-Roll Steel	Cutting Capacity Stainless Steel	Carded Stock #
103 Cuts Straight and Wide Curves	10" / 250 mm	1-3/16" / 30 mm	Yellow	18 ga / 1.19 mm	22 ga / .84 mm	21003
105 Bulldog Snip, Notch and Trim	9" / 225 mm	3/4" / 19 mm	Red	16 ga / 1.52 mm	18 ga / 1.19 mm	21005



# PROSNIP® MULTI-PURPOSE SNIPS

3-1/8" Length of Cut

Unique Strengthening Ribs

- Minimize blade flex

Compound leverage design allows PROSNIP® ExtraCut Snips to take huge 3-1/8" cuts in materials with a single bite.

## Cuts:

- Flashing
- Lightweight metal strapping
- Plastic
- Canvas
- Lawn and garden netting
- Cardboard
- Window screening
- Vinyl flooring
- Gutters and down spouts
- Vinyl and aluminum siding
- Sheet metal

E-Z Close Latch

- Allows one-handed operation

Textured Grips

- For greater comfort and control

Narrow Hand Span

- For cutting ease

304

## ExtraCut Snip, Compound Leverage

Description	Size	Length of Cut	Grip Color	Maximum Cold-Roll Steel	Cutting Capacity Stainless Steel	Carded Stock #
304 Cuts Straight and Curves	11-3/4" / 298 mm	3-1/8" / 80 mm	Blue	24 ga / .61 mm	N/A	21304

Comfortable Plastisol™ Handles

- For comfortable handling of the tool and less hand fatigue

Textured Grips

- For greater comfort and control

104

E-Z Close Latch

- Allows one-handed operation

Multiple Purpose Snip

- Great for cutting sheet metal, vinyl, plastic, rubber and many other applications

Polished High-Alloy Blades

- For a high-quality finish

## Utility Snip, Compound Leverage

Description	Size	Length of Cut	Grip Color	Maximum Cold-Roll Steel	Cutting Capacity Stainless Steel	Carded Stock #
104 Cuts Straight and Curves	10" / 250 mm	1-3/16" / 30 mm	Yellow	18 ga / 1.19 mm	N/A	21004

# PROSNIP® OFFSET SNIPS

**Patented Built-In Pinch Point Wire Cutter**

- Eliminates the need for a second tool



20SL

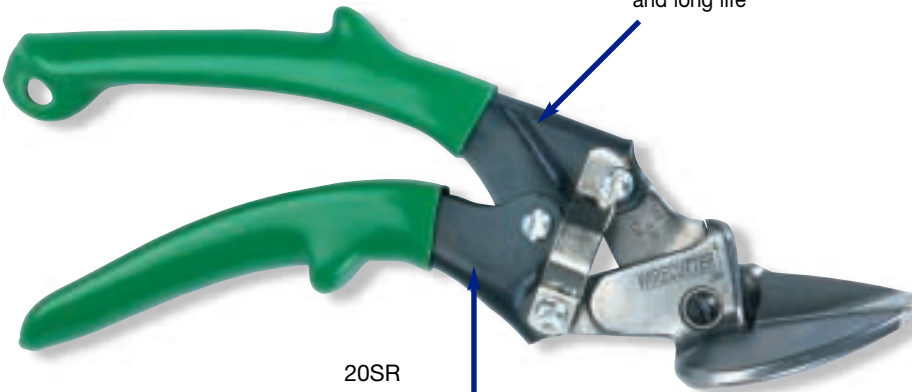
**Comfortable Grips**  
• Help prevent hand fatigue

**Forged Blades**

- Forged from the finest steel for greater strength, ease of cut and long life

**Unique Spring Design**

- For fast, easy snipping and long life



20SR

**Offset Design**  
• Keeps hands safely above your work on long inside cuts

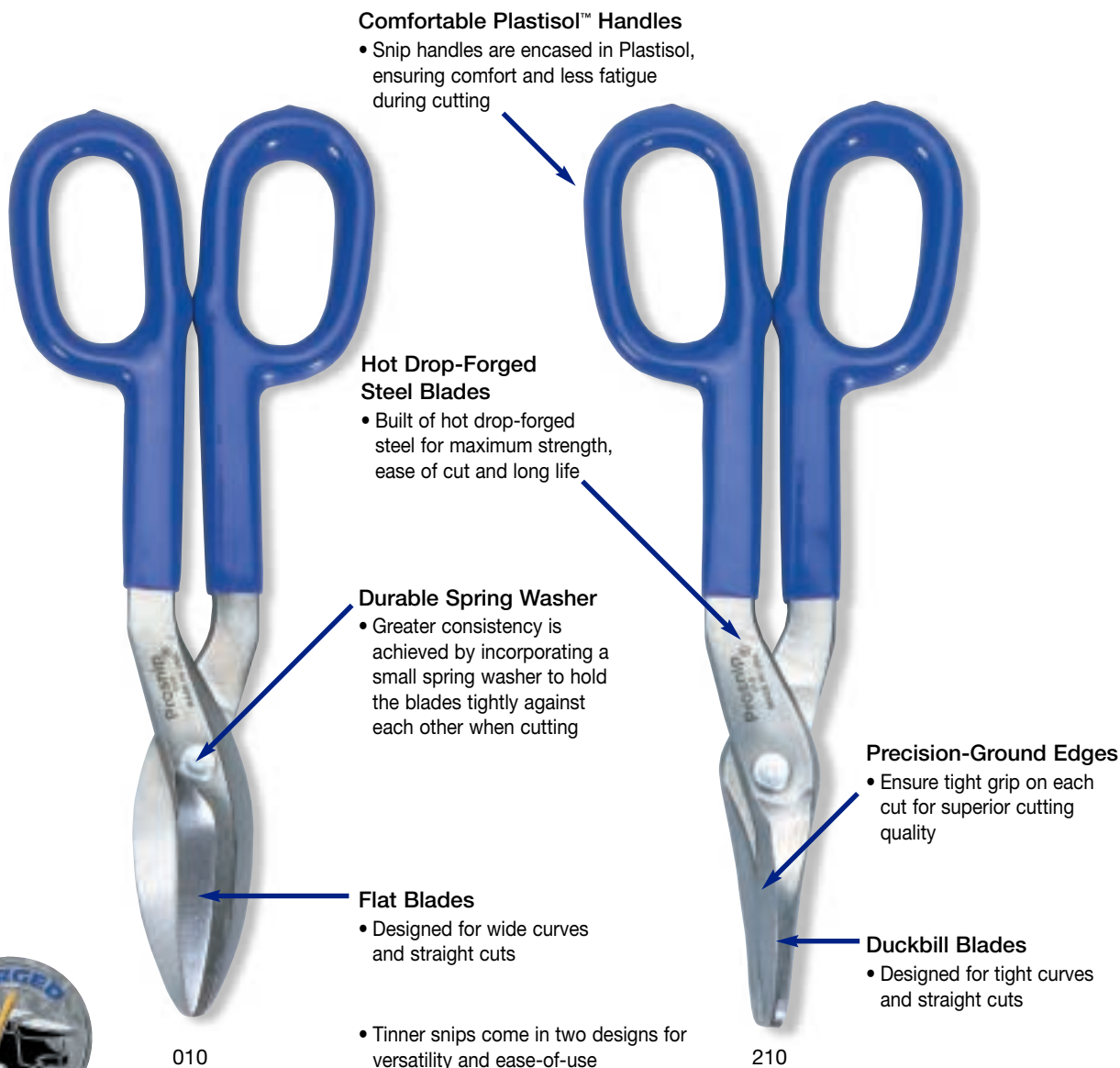


## Offset Snips, Compound Leverage

Description	Size	Length of Cut	Grip Color	Maximum Cold-Roll Steel	Cutting Capacity Stainless Steel	Carded Stock #
20SL Cuts Straight and Angles or Curves Left	9-1/2" / 240 mm	1-3/16" / 30 mm	Red	18 ga / 1.19 mm	N/A	20001
20SR Cuts Straight and Angles or Curves Right	9-1/2" / 240 mm	1-3/16" / 30 mm	Green	18 ga / 1.19 mm	N/A	20002

# PROSNIP® TINNER SNIPS

Snips



## Tinner Snips

Description		Size	Maximum Cutting Capacity Cold-Roll Steel	Maximum Cutting Capacity Stainless Steel	Carded Stock #
007	Cuts Straight and Wide Curves	7" / 175 mm	24 ga / .61 mm	28 ga / .38 mm	22007
010	Cuts Straight and Wide Curves	10" / 250 mm	22 ga / .84 mm	26 ga / .45 mm	22010
012	Cuts Straight and Wide Curves	12-3/4" / 320 mm	20 ga / .91 mm	22 ga / .84 mm	22012
207	Cuts Straight and Tight Curves	7" / 175 mm	26 ga / .45 mm	28 ga / .38 mm	23007
210	Cuts Straight and Tight Curves	10" / 250 mm	24 ga / .61 mm	26 ga / .45 mm	23010
212	Cuts Straight and Tight Curves	12-3/4" / 320 mm	22 ga / .84 mm	24 ga / .61 mm	23012





# ***Hex Tools***

**Fold-Up Sets**

**L-Key Tool Holders**

**L-Key Hex Tool Sets**

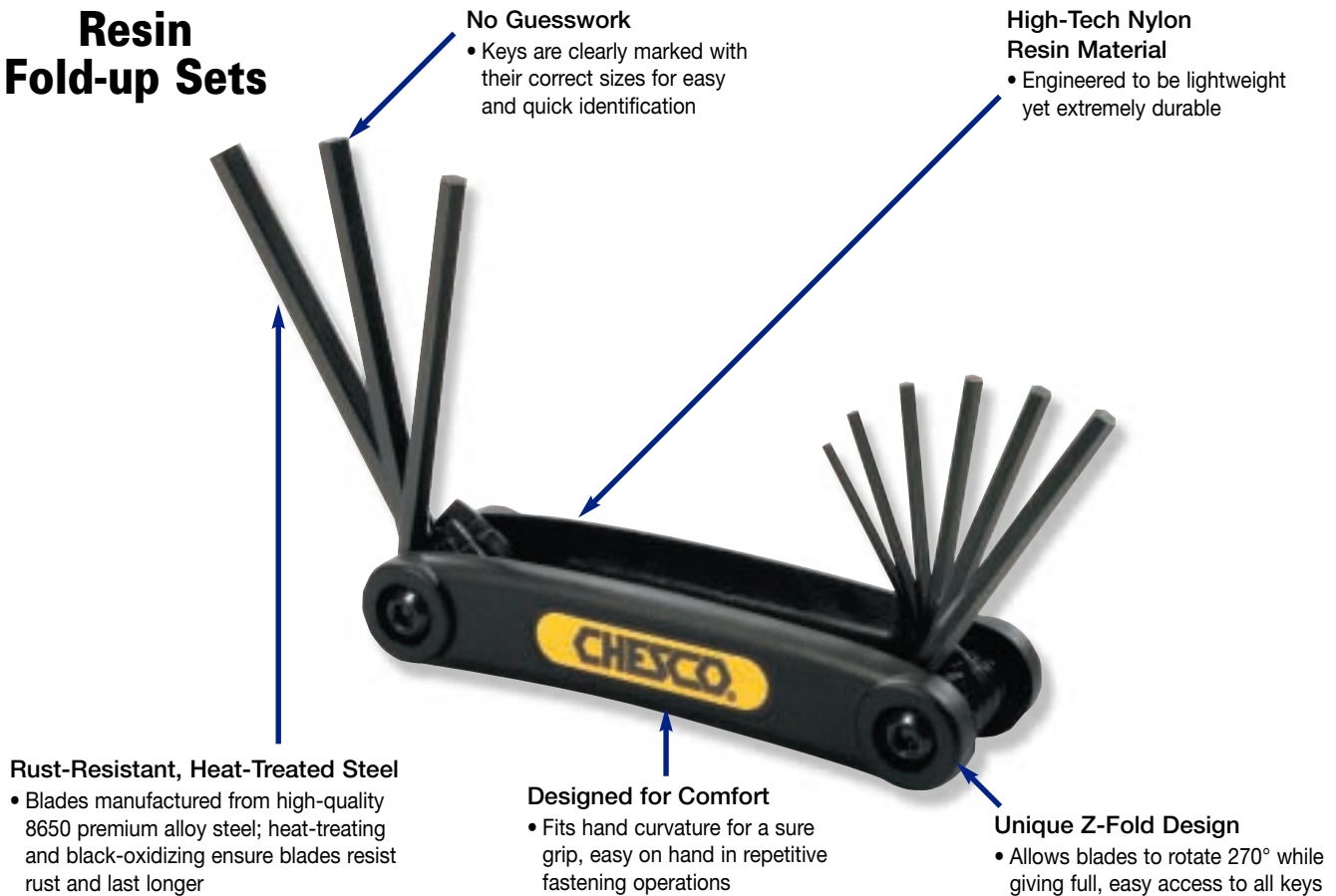
**L-Key Hex Tools**

**Vinyl-Grip T-Handle  
Hex Tools**

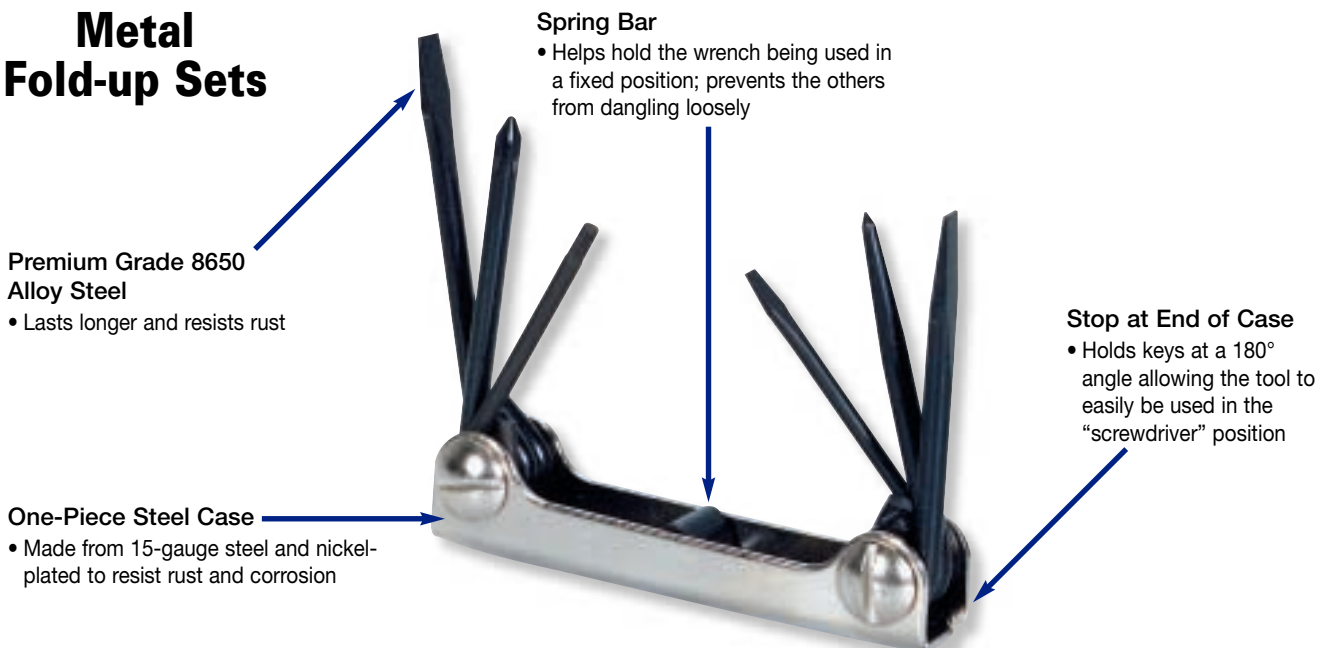
**Loop-Grip T-Handle  
Hex Tools**

# CHESCO® HEX TOOLS

## Resin Fold-up Sets



## Metal Fold-up Sets



# CHESCO® FOLD-UP SETS

Description	Size	Contents	Stock #
9 pc Fractional	Medium	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16"	98095
9 pc Fractional	Large	5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	98091
5 pc Fractional	Extra Large	3/16", 7/32", 1/4", 5/16", 3/8"	98051
7 pc Metric	Medium	1.5, 2, 2.5, 3, 4, 5, 6	98017
7 pc Metric	Large	2, 2.5, 3, 4, 5, 6, 8	98027
5 pc Metric	Extra Large	4, 5, 6, 8, 10	98015
6 pc Screwdriver	Medium	1/8", 3/16", 1/4" Flat Head, #1 ACR Phillips®, T-15 TORX, 3/16" AWL	98045
8 pc TORX®**	Medium	T-6, T-7, T-8, T-9, T-10, T-15, T-20, T-25	98055
7 pc TORX	Large	T-10, T-15, T-20, T-25, T-27, T-30, T-40	98057
5 pc TORX	Extra Large	T-30, T-40, T-45, T-50, T-55	98058

## Resin Fold-Up Sets



Hex Tools

## Resin Fold-Up Clip Strips and Buckets

Description	Contents	Stock #
Clip Strip	6 pc Screwdriver	98045CS
Clip Strip	9 pc Fractional, Large (5/64" to 1/4")	98091CS
Bucket	6 pc Screwdriver	98045CD



98045CD

## Resin Fold-Up Combo Sets

Description	Contents	Stock #
3 pc Set	98027, 98057, and 98091 with Pouch	98075
4 pc Set	98027, 98045, 98057, and 98091 in Clamshell	98076



98075



98076

Description	Size	Contents	Stock #
8 pc Fractional	Small	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"	88081
9 pc Fractional	Medium	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16"	88095
9 pc Fractional	Large	5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	88091
5 pc Fractional	Extra Large	3/16", 7/32", 1/4", 5/16", 3/8"	88051
7 pc Metric	Medium	1.5, 2, 2.5, 3, 4, 5, 6	88017
5 pc Metric	Extra Large	4, 5, 6, 8, 10	88015
6 pc Screwdriver	Medium	1/8", 3/16", 1/4" Flat Head, #1 ACR Phillips, T-15 Torx, 3/16" AWL	88045
7 pc TORX	Small	T-6, T-7, T-8, T-9, T-10, T-15, T-20	88056
7 pc TORX	Large	T-10, T-15, T-20, T-25, T-27, T-30, T-40	88057

## Metal Fold-Up Sets



\* ACR PHILLIPS® is a registered trademark of the Phillips Screw Co.

\*\* TORX® is a registered trademark of Camcar Division of Textron, Inc.



# CHESCO® L-KEY TOOL HOLDERS

## Color Coded for Easy Identification

- Quick identification – fractional sets are color coded blue, metric sets are colored red

## Injection Molded Tool Holder

- Keeps all of the tools in the set organized for quick and easy selection
- The ultimate in hex tool organization

## Innovative Locking Mechanism

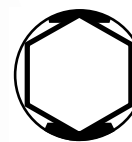
- Keeps the tools from falling out
- With a simple half-twist, the desired tool slides out easily

## Stamped Holder

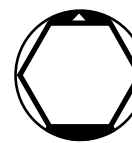
- L-key sizes are stamped on the tool holder for easy size identification
- Shows the CHESCO logo to indicate that you are getting the genuine product

## Full Selection

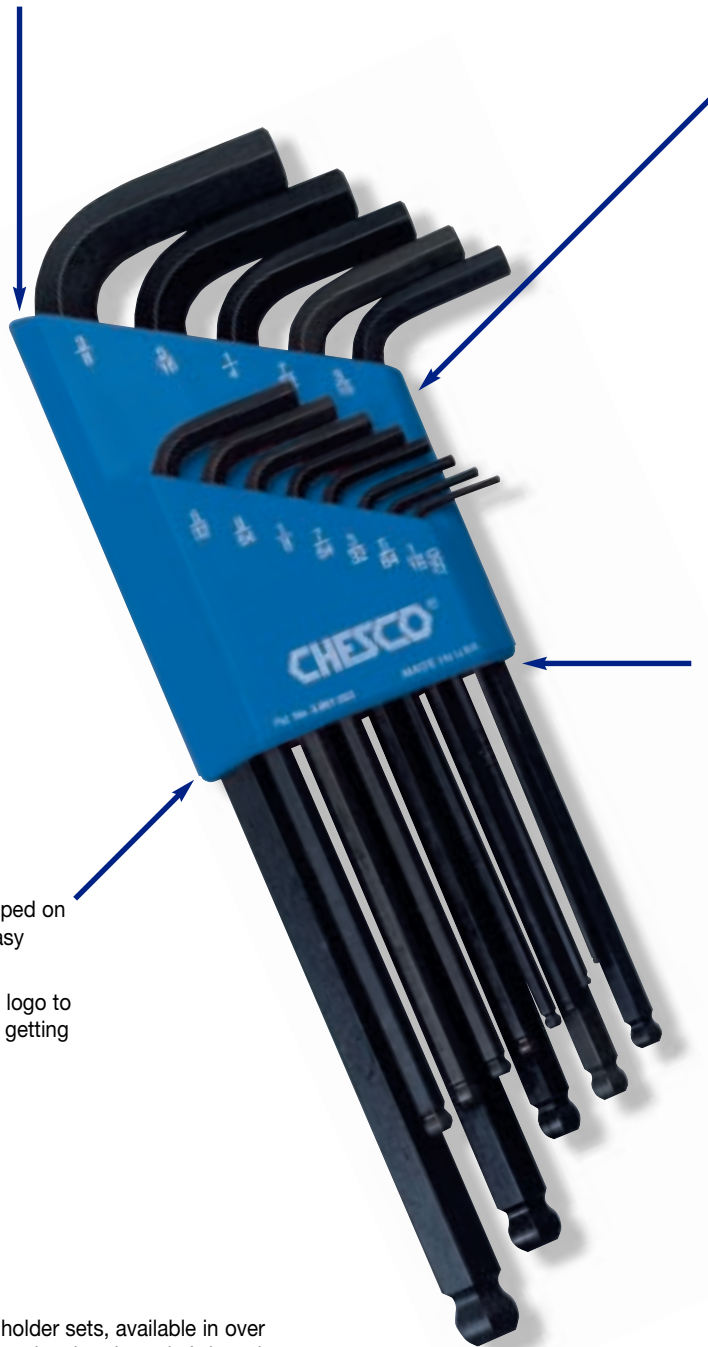
- CHESCO L-key tool holder sets, available in over 20 models, contain fractional and metric L-keys in short arm, long arm, and ball-end styles
- Fractional key sizes range from .050" to 3/8", and metric sizes range from 1.5 mm to 10 mm
- Inch sets are offered from 7 pieces to 13 pieces, and metric sets are available in 6 pieces and 9 pieces
- Fractional/metric combination sets are also included in the series



LOCKED



UNLOCKED



# CHESCO® L-KEY TOOL HOLDERS

## L-Key Tool Holders

Description	Size	Contents	Stock #
7 pc Fractional	Short	5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16"	98012
7 pc Fractional	Long	5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16"	98022
7 pc Fractional Ball-End	Long	5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16"	98032
8 pc Fractional	Short	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"	98014
8 pc Fractional	Long	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"	98024
8 pc Fractional Ball-End	Long	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"	98034
10 pc Fractional	Short	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	98016
10 pc Fractional	Long	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	98026
10 pc Fractional Ball-End	Long	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	98036
12 pc Fractional	Short	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16"	98018
12 pc Fractional	Long	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16"	98028
12 pc Fractional Ball-End	Long	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16"	98038
13 pc Fractional	Short	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	98010
13 pc Fractional	Long	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	98020
13 pc Fractional Ball-End	Long	.050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	98030
6 pc Metric	Short	1.5, 2, 2.5, 3, 4, 5	98042
6 pc Metric	Long	1.5, 2, 2.5, 3, 4, 5	98052
6 pc Metric Ball-End	Long	1.5, 2, 2.5, 3, 4, 5	98062
9 pc Metric	Short	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	98040
9 pc Metric	Long	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	98050
9 pc Metric Ball-End	Long	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	98060



98010



98030



98050

Hex Tools

## L-Key Tool Holder Combo Sets

Description	Size	Contents	Stock #
22 pc Set	Long	98020 and 98050 .050" – 3/8", 1.5 – 10	98070
22 pc Set Ball-End	Long	98030 and 98060 .050" – 3/8", 1.5 – 10	98070BE



98070

## Resin Fold-up / L-Key Tool Holder Combo Set

Description	Contents	Stock #
3 pc Set	98027, 98091, and 98020 in Clamshell	98080



98080

# CHESCO® L-KEY HEX TOOL SETS

## L-Key Pouched Sets



88024

Description	Size	Contents	Stock #
7 pc Fractional	Short	5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"	88022
11 pc Fractional	Short	.050", 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	88024
11 pc Fractional	Short	5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", 1/2", 9/16"	88025
9 pc Fractional	Long	5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	88031
11 pc Fractional	6" Long	5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	88034
7 pc Fractional	12" Long	5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"	88035
7 pc Metric	Short	2, 2.5, 3, 4, 5, 6, 8	88060
9 pc Metric	Short	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	88061
9 pc TORX®*	Short	T-10, T-15, T-20, T-25, T-27, T-30, T-40, T-45, T-50	88185
13 pc TORX	Short	T-7, T-8, T-9, T-10, T-15, T-20, T-25, T-27, T-30, T-40, T-45, T-50, T-55	88186

## L-Key Clamshell Sets



88036

Description	Contents	Stock #
25 pc Fractional / Metric Pouched	Long / Short .050" – 3/8", 1.3 – 10	88036
18 pc Fractional Pouched	Long / Short .050" – 5/16"	88038

## L-Key Metal Box Sets



88033

Description	Size	Contents	Stock #
15 pc Fractional	Short	.028", .035", .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	88029
18 pc Fractional	Short	.028", .035", .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", 1/2", 9/16", 5/8"	88030
13 pc Fractional	Long	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", 1/2"	88033
12 pc Metric	Short	.7, .9, 1.3, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10	88063
15 pc Metric	Short	.7, .9, 1.3, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12, 14, 17	88064



# CHESCO® L-KEY HEX TOOLS

**Easy Identification**

- Labeled to allow easy key selection

**Sturdy Reclosable Case**

- Convenient for hardware, automotive and industrial hex tool sales or storage

**Full Range of Sizes in Each Set:**

- Inch sets: .050" through 3/8"
- Metric sets: 1.5 mm through 10 mm

**Sets To Meet Virtually Any Need**

- Available in short arm, long arm, and ball-end

**Premium Steel For Premium Strength**

- 8650 alloy steel for high-torque, high-strength applications

Hex Tools

## L-Key Merchandisers

Description	Contents	Stock #
FRACTIONAL		
260 pc – Short Arm	25 ea: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16" 10 ea: 7/32", 1/4", 5/16" 5 ea: 3/8"	86900
260 pc – Long Arm	25 ea: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16" 10 ea: 7/32", 1/4", 5/16" 5 ea: 3/8"	86700
125 pc – Ball-End	10 ea: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16" 5 ea: 3/8"	86200
METRIC		
175 pc – Short Arm	25 ea: 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm 10 ea: 6 mm, 8 mm 5 ea: 10 mm	86950
175 pc – Long Arm	25 ea: 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm 10 ea: 6 mm, 8 mm 5 ea: 10 mm	86750
85 pc – Ball-End	10 ea: 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm 5 ea: 10 mm	86250



86200

# CHESCO® L-KEY HEX TOOLS

## L-Keys



86813

Hex Tools

Description	Short Arm Series Stock #	Long Arm Series Stock #	6" Long Arm Series Stock #	12" Long Arm Series Stock #
.028" FRACTIONAL	86801	—	—	—
.035"	86802	—	—	—
.050"	86803	86703	—	—
1/16"	86804	86704	—	—
5/64"	86805	86705	86605	86505
3/32"	86806	86706	86606	86506
7/64"	86807	86707	86607	—
1/8"	86808	86708	86608	86508
9/64"	86809	86709	86609	—
5/32"	86810	86710	86610	86510
3/16"	86811	86711	86611	86511
7/32"	86812	86712	86612	86512
1/4"	86813	86713	86613	86513
5/16"	86814	86714	86614	—
3/8"	86815	86715	86615	—
7/16"	86816	86716	—	—
1/2"	86817	86717	—	—
9/16"	86818	86718	—	—
5/8"	86819	86719	—	—
3/4"	86820	86720	—	—
7/8"	86821	86721	—	—
1"	86822	86722	—	—
0.7 mm METRIC	86850	—	—	—
0.9 mm	86851	—	—	—
1.3 mm	86852	86752	—	—
1.5 mm	86853	86753	—	—
2 mm	86854	86754	—	—
2.5 mm	86855	86755	—	—
3 mm	86856	86756	—	—
4 mm	86857	86757	—	—
5 mm	86858	86758	—	—
6 mm	86859	86759	—	—
7 mm	86860	86760	—	—
8 mm	86861	86761	—	—
9 mm	86862	86762	—	—
10 mm	86863	86763	—	—
12 mm	86864	86764	—	—
14 mm	86865	86765	—	—
17 mm	86866	86766	—	—
19 mm	86867	86767	—	—

## TORX®\* L-Keys



86188

Description	Short Arm Series Stock #
T-7	86180
T-8	86181
T-9	86182
T-10	86183
T-15	86184
T-20	86185
T-25	86186
T-27	86187
T-30	86188
T-40	86189
T-45	86190
T-50	86191
T-55	86192

# CHESCO® L-KEY HEX TOOLS

Description		Long Arm Series Stock #
.050"	FRACTIONAL	86203
1/16"		86204
5/64"		86205
3/32"		86206
7/64"		86207
1/8"		86208
9/64"		86209
5/32"		86210
3/16"		86211
7/32"		86212
1/4"		86213
5/16"		86214
3/8"		86215
1.5 mm METRIC		86253
2 mm		86254
2.5 mm		86255
3 mm		86256
4 mm		86257
5 mm		86258
6 mm		86259
8 mm		86261
10 mm		86263

## Ball-End L-Keys



86213

Hex Tools

### Premium Grade Steel

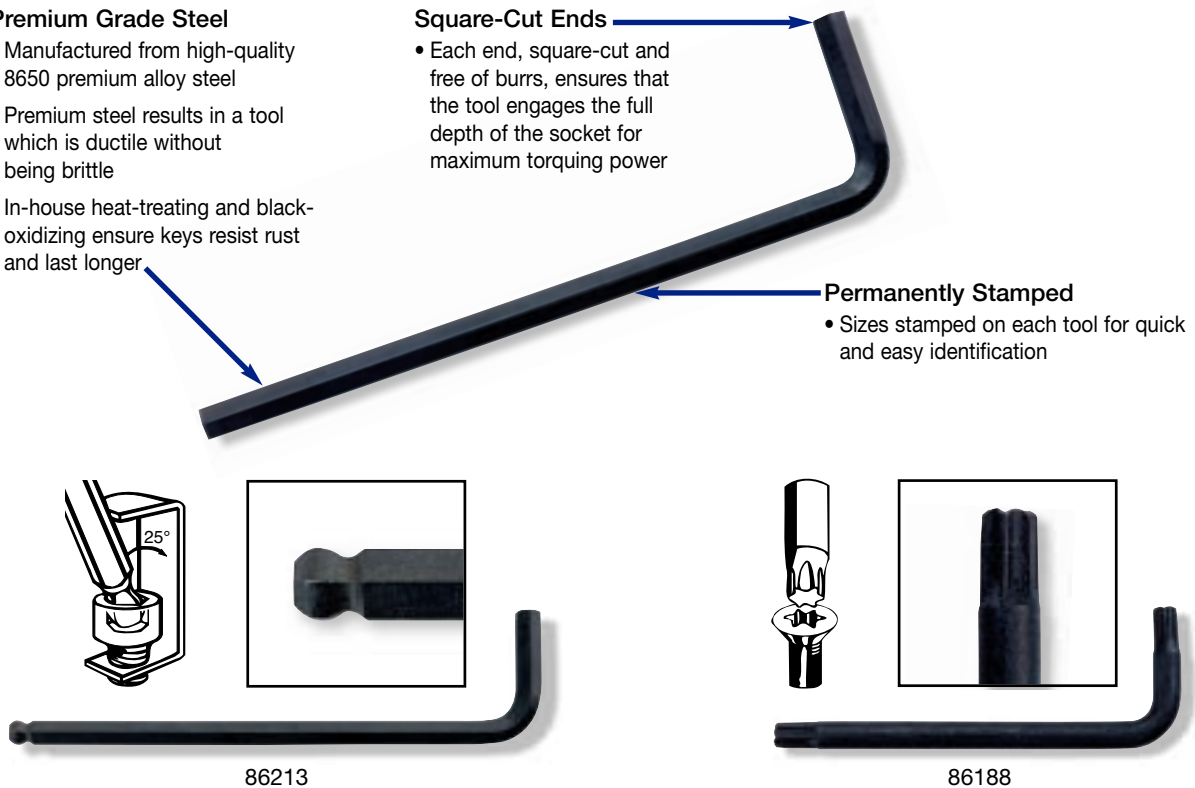
- Manufactured from high-quality 8650 premium alloy steel
- Premium steel results in a tool which is ductile without being brittle
- In-house heat-treating and black-oxidizing ensure keys resist rust and last longer

### Square-Cut Ends

- Each end, square-cut and free of burrs, ensures that the tool engages the full depth of the socket for maximum torquing power

### Permanently Stamped

- Sizes stamped on each tool for quick and easy identification



86213

86188

### Ball-End L-Keys

- For easy access
- Ball-end hex keys allow 25° angle entry for off axis rotation to speed up applications for those hard-to-reach fasteners

### TORX® L-Keys

- Feature a six lobe design that reduces camout tendencies
- Provides greater concentration of drive force or torquing power



# CHESCO® VINYL-GRIP T-HANDLE HEX TOOLS

Hex Tools

## Stamped Handle

- To indicate you are getting genuine high-quality CHESCO hex tools

## Color Coded for Easy Identification

- Quick identification – fractional sizes feature blue handles, metric sizes feature red handles

## Cushion Vinyl Grip

- Vinyl coating allows for a comfortable cushioned grip, while providing increased leverage
- Full-fisted grip reduces hand fatigue
- Multiplies torque power to all hex-head fasteners while cushioning your hand for greater comfort

## Solid Steel Core for Added Strength

- Designed to permanently lock in the hex blade, eliminating the possibility of the hex shaft pushing through the handle during high-torque applications

## Size Ranges

- To reach those hard-to-access tight places easier, vinyl-grip T-handle hex keys are available in both 6" and 9" lengths

## Shaft

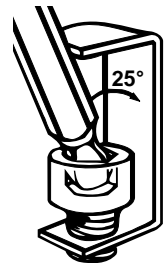
- High-quality 8650 alloy steel accurately sized across flats and corners

## Premium Grade Steel

- Manufactured from high-quality 8650 premium alloy steel
- Premium steel results in a tool which is ductile without being brittle
- Built-in strength and durability for longer life and retention of dimensional accuracy

## Also Available in Ball-End For Easy Access

- Ball-end T-handles allow 25° angle entry for off axis rotation to speed up applications for those hard-to-reach fasteners
- 6" length



## Built to Meet Any Need

- CHESCO vinyl-grip T-handles are designed to meet numerous applications, including automotive, industrial, electronics, workshop, homeowner, and hobbyist uses

# CHESCO® T-HANDLE SETS

## 6" Vinyl-Grip T-Handle Sets

Description	Contents	Stock #
8 pc Fractional Pouched	3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	81430
10 pc Fractional Metal Stand	3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	81432
6 pc Metric Pouched	2, 2.5, 3, 4, 5, 6	81435
8 pc Metric Pouched	2, 2.5, 3, 4, 5, 6, 8, 10	81437
8 pc Metric Metal Stand	2, 2.5, 3, 4, 5, 6, 8, 10	81439



81430



81439

## 6" Vinyl-Grip Ball-End T-Handle Sets

Description	Contents	Stock #
10 pc Fractional Metal Stand	3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	81232
8 pc Metric Metal Stand	2, 2.5, 3, 4, 5, 6, 8, 10	81239



81232

## 9" Vinyl-Grip T-Handle Sets

Description	Contents	Pouched Stock #
6 pc Fractional	5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	81334
5 pc Metric	4, 5, 6, 8, 10	81338



81338

## 6" Loop-Grip T-Handle Sets

Description	Contents	Pouched Stock #
8 pc Fractional	3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	82430
10 pc Fractional	3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	82432
5 pc Metric	2.5, 3, 4, 5, 6	82433
8 pc Metric	2, 2.5, 3, 4, 5, 6, 8, 10	82434



82434

## 9" Loop-Grip T-Handle Sets

Description	Contents	Pouched Stock #
8 pc Fractional	3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	82334
10 pc Fractional	3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"	82336
5 pc Metric	2.5, 3, 4, 5, 6	82337
8 pc Metric	2, 2.5, 3, 4, 5, 6, 8, 10	82338



82336

# CHESCO® VINYL-GRIP T-HANDLE HEX TOOLS

## 6" & 9" Vinyl-Grip T-Handle Hex Keys



85363

Description	6" Length Series Stock #	9" Length Series Stock #
3/32" FRACTIONAL	85406	—
7/64"	85407	—
1/8"	85408	—
9/64"	85409	—
5/32"	85410	85310
3/16"	85411	85311
7/32"	85412	85312
1/4"	85413	85313
5/16"	85414	85314
3/8"	85415	85315
2 mm METRIC	85454	—
2.5 mm	85455	—
3 mm	85456	—
4 mm	85457	85357
5 mm	85458	85358
6 mm	85459	85359
8 mm	85461	85361
10 mm	85463	85363

## 6" Vinyl-Grip Ball-End T-Handle Hex Keys

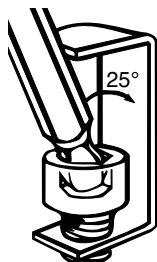


85215

Description	6" Length Series Stock #
3/32" FRACTIONAL	85206
7/64"	85207
1/8"	85208
9/64"	85209
5/32"	85210
3/16"	85211
7/32"	85212
1/4"	85213
5/16"	85214
3/8"	85215
2 mm METRIC	85254
2.5 mm	85255
3 mm	85256
4 mm	85257
5 mm	85258
6 mm	85259
8 mm	85261
10 mm	85263

### Ball-End For Easy Access

- Ball-end T-handles allow 25° angle entry for off axis rotation to speed up applications for those hard-to-reach fasteners



# CHESCO® LOOP-GRIP T-HANDLE HEX TOOLS

## 6" & 9" Loop-Grip T-Handle Hex Keys

Description		6" Length Series Stock #	9" Length Series Stock #
3/32"	FRACTIONAL	84406	84306
7/64"		84407	84307
1/8"		84408	84308
9/64"		84409	84309
5/32"		84410	84310
3/16"		84411	84311
7/32"		84412	84312
1/4"		84413	84313
5/16"		84414	84314
3/8"		84415	84315
2 mm		84454	84354
2.5 mm		84455	84355
3 mm		84456	84356
4 mm		84457	84357
5 mm		84458	84358
6 mm		84459	84359
8 mm		84461	84361
10 mm		84463	84363



Hex Tools

### Loop Handle

- The balanced design of the handle allows for maximum leverage proportionate to the size of the steel

### Steel Construction

- Made with the same high-quality 8650 alloy steel as other CHESCO hex tools

### Size Identification

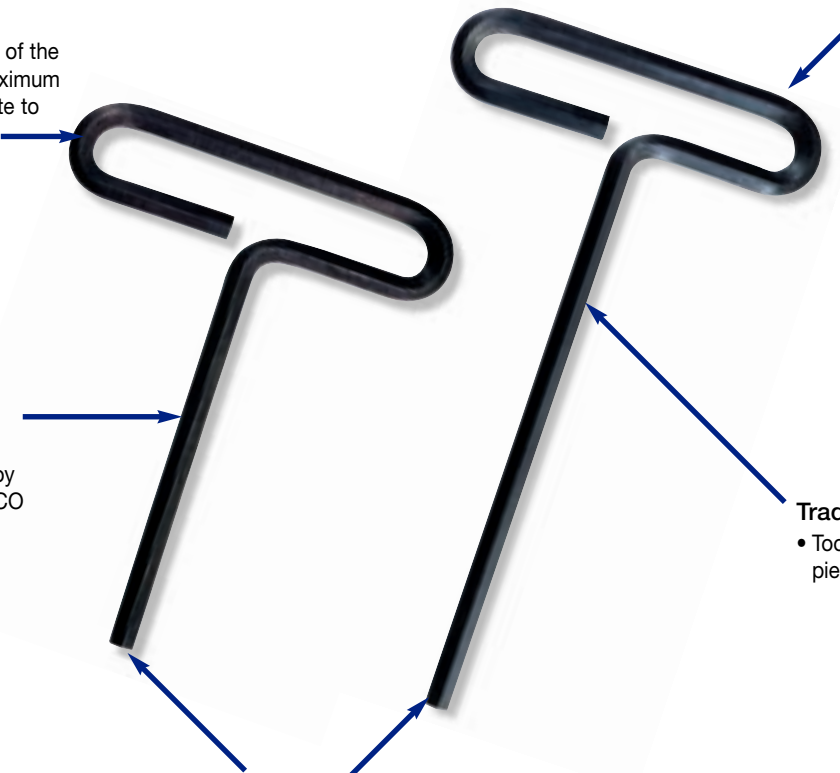
- Each tool is stamped with the CHESCO logo and U.S.A. to indicate that you are getting the genuine product
- Like other CHESCO Hex Tools, these loop T-handle hex keys are clearly marked with their sizes for quick and easy identification

### Traditional Design

- Tool is made of one continuous piece of steel

### Size Range

- To better meet various applications, loop T-handle hex keys are available in both 6" and 9" lengths





# CHESCO® TOOL SETS – HEX TOOL KEY SIZE CHART

## HEX KEY SETS — FRACTIONAL

BLACK BOXES INDICATE KEYS INCLUDED IN SET.

ITEM	NO. OF PIECES	DESCRIPTION	PAGE NO.	.028	.035	.050	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4
81232	10	T-HANDLE SET — 6" VINYL — BE	10																				
81334	6	T-HANDLE SET - 9" VINYL	10																				
81430	8	T-HANDLE SET — 6" VINYL	10																				
81432	10	T-HANDLE SET — 6" VINYL	10																				
82334	8	T-HANDLE SET — 9" LOOP	10																				
82336	10	T-HANDLE SET — 9" LOOP	10																				
82430	8	T-HANDLE SET — 6" LOOP	10																				
82432	10	T-HANDLE SET — 6" LOOP	10																				
88022	7	L-KEY SET — SA	5																				
88024	11	L-KEY SET — SA	5																				
88025	11	L-KEY SET — SA	5																				
88029	15	L-KEY SET METAL BOX — SA	5																				
88030	18	L-KEY SET METAL BOX — SA	5																				
88031	9	L-KEY SET — LA	5																				
88033	13	L-KEY SET — LA	5																				
88034	11	L-KEY SET — 6" LA	5																				
88035	7	L-KEY SET — 12" LA	5																				
88038	18	COMBO-SHORT (Top) LONG (Bott)	5																				
88051	5	FOLD-UP SET—X-LARGE	2																				
88081	8	FOLD-UP SET — SMALL	2																				
88091	9	FOLD-UP SET — LARGE	2																				
88095	9	FOLD-UP SET — MED.	2																				
98010	13	L-KEY HOLDER SET — SA	4																				
98012	7	L-KEY HOLDER SET — SA	4																				
98014	8	L-KEY HOLDER SET — SA	4																				
98016	10	L-KEY HOLDER SET — SA	4																				
98018	12	L-KEY HOLDER SET — SA	4																				
98020	13	L-KEY HOLDER SET — LA	4																				
98022	7	L-KEY HOLDER SET — LA	4																				
98024	8	L-KEY HOLDER SET — LA	4																				
98026	10	L-KEY HOLDER SET — LA	4																				
98028	12	L-KEY HOLDER SET — LA	4																				
98030	13	L-KEY HOLDER SET — BE	4																				
98032	7	L-KEY HOLDER SET — BE	4																				
98034	8	L-KEY HOLDER SET — BE	4																				
98036	10	L-KEY HOLDER SET — BE	4																				
98038	12	L-KEY HOLDER SET — BE	4																				
98051	5	FOLD-UP HEX SET — X-LARGE	2																				
98091	9	FOLD-UP HEX SET — LARGE	2																				
98095	9	FOLD-UP HEX SET — MED.	2																				

Hex Tools

FRACTIONAL METRIC

				.028	.035	.050	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4
88036	25	INCH/METRIC L-KEY COMBINATION SET	5																				
98070	22	COMBINATION L-KEY	4																				
98070BE	22	COMB. BALL END L-KEY SET	4																				
				.7	.9	1.3	1.50	2	2.5	3	4	4.5	5	5.5	6	7	8	9	10	12	14	17	19
88045	METAL FOLD-UP SCREWDRIVER SET – MED.		2	CONTAINS 1/8", 3/16" & 1/4" FLAT BLADES & #1 PHILLIPS BLADE, 3/16" AWL, T15 *TORX® DRIVER.																			
98045	RESIN FOLD-UP SCREWDRIVER SET – MED.		2	CONTAINS 1/8", 3/16", & 1/4" FLAT BLADES & #1 PHILLIPS BLADE, 3/16" AWL, T15 TORX DRIVER.																			
98075	3-PC. KITBAG RESIN FOLD-UP SET		2	CONTAINS 98027, 98057, 98091																			
98076	4-PC. CLAMSHELL RESIN FOLD-UP SET		2	CONTAINS 98027, 98045, 98057, 98091																			
98080	3-PC. CLAMSHELL COMBO SET		4	CONTAINS 98027, 98091, 98020																			

## TORX®\* TOOL SETS

BLACK BOXES INDICATE KEYS INCLUDED IN SET.

ITEM	NO. OF PIECES	DESCRIPTION	PAGE NO.	T6	7	8	9	10	15	20	25	27	30	40	45	50	55
88056	7	FOLD-UP SET — SMALL	2														
88057	7	FOLD-UP SET — LARGE	2														
88185	9	L-KEY SET — SA	5														
88186	13	L-KEY SET — SA	5														
98055	8	FOLD-UP HEX SET — MED.	2														
98057	7	FOLD-UP HEX SET — LARGE	2														
98058	5	FOLD-UP HEX SET — X-LARGE	2														

SA = SHORT ARM  
LA = LONG ARM  
BE = BALL-END

# CHESCO® TOOL SETS – HEX TOOL KEY SIZE CHART

HEX KEY SETS — METRIC														BLACK BOXES INDICATE KEYS INCLUDED IN SET.									
ITEM	NO. OF PIECES	DESCRIPTION	PAGE NO.	.07	.09	1.3	1.50	2	2.5	3	4	5	6	7	8	9	10	12	14	17	19		
81338	5	T-HANDLE SET — 9" VINYL	10																				
81239	8	T-HANDLE SET — 6" VINYL — BE	10																				
81435	6	T-HANDLE SET — 6" VINYL	10																				
81437	8	T-HANDLE SET — 6" VINYL	10																				
81439	8	T-HANDLE SET — 6" VINYL	10																				
82337	5	T-HANDLE SET — 9" LOOP	10																				
82338	8	T-HANDLE SET — 9" LOOP	10																				
82433	5	T-HANDLE SET — 6" LOOP	10																				
82434	8	T-HANDLE SET — 6" LOOP	10																				
88015	5	FOLD-UP SET — X-LARGE	2																				
88017	7	FOLD-UP SET — MED	2																				
88060	7	L-KEY SET — SA	5																				
88061	9	L-KEY SET — SA	5																				
88063	12	L-KEY SET — SA	5																				
88064	15	L-KEY SET — SA	5																				
98015	5	FOLD-UP HEX SET — X-LARGE	2																				
98017	7	FOLD-UP HEX SET — MED.	2																				
98027	7	FOLD-UP HEX SET — LARGE	2																				
98040	9	L-KEY HOLDER SET—SHORT	4																				
98042	6	L-KEY HOLDER SET — SHORT	4																				
98050	9	L-KEY HOLDER SET — LONG	4																				
98052	6	L-KEY HOLDER SET — LONG	4																				
98060	9	L-KEY HOLDER SET—BALL END	4																				
98062	6	L-KEY HOLDER SET—BALL END	4																				

HEX KEY/SCREW SELECTION CHART

	HEX KEY SIZE	CAP SCREWS				SET SCREWS	SHOULDER SCREWS	PRESSURE PLUGS
		1960 SERIES SOCKET HEAD	FLAT HEAD	BUTTON HEAD	LOW HEAD			
FRACTIONAL	.028	—	—	—	—	0	—	—
	.035	—	0	0	—	1 • 2	—	—
	.050	0	1 • 2	1 • 2	4	3 • 4	—	—
	1/16	1	3 • 4	3 • 4	5 • 6	5 • 6	—	—
	5/64	2 • 3	5 • 6	5 • 6	8	8	—	—
	3/32	4 • 5	8	8	10	10	—	—
	7/64	6	—	—	—	—	—	—
	1/8	—	10	10	1/4	1/4	1/4	—
	9/64	8	—	—	—	—	—	—
	5/32	10	1/4	1/4	5/16	5/16	5/16	1/16
	3/16	1/4	5/16	5/16	3/8	3/8	3/8	1/8
	7/32	—	3/8	3/8	7/16	7/16	—	—
	1/4	5/16	7/16	—	1/2	1/2	1/2	1/4
	5/16	3/8	1/2	1/2	5/8	5/8	5/8	3/8
	3/8	7/16 • 1/2	5/8	5/8	—	3/4	3/4	1/2
	7/16	—	—	—	—	—	—	—
	1/2	5/8	3/4	—	—	7/8	1	—
	9/16	—	7/8	—	—	1 • 1-1/8	—	3/4
	5/8	3/4	1	—	—	1-1/4 • 1-3/8	1-1/4	1
	3/4	7/8 • 1	1-1/8	—	—	1-1/2	—	1-1/4
	7/8	1-1/8 • 1-1/4	1-1/4 • 1-3/8	—	—	—	1-1/2	—
	1	1-3/8 • 1-1/2	1-1/2	—	—	1-3/4 • 2	1-3/4	1-1/2 • 2
METRIC								
	HEX KEY SIZE	1960 SERIES SOCKET HEAD	FLAT HEAD	BUTTON HEAD	LOW HEAD	SET SCREWS	SHOULDER SCREWS	
	0.7	—	—	—	—	1.4 • 1.6 • 1.7	—	
	0.9	—	—	—	—	2 • 2.3	—	
	1.3	—	—	—	—	2.5 • 2.6	—	
	1.5	1.6 • 1.7 • 2.0	—	—	—	3	—	
	2.0	2.3 • 2.5 • 2.6	3	3	—	4	—	
	2.5	3	4	4	—	5	—	
	3.0	4	5	5	4	6	6	
	4.0	5	6	6	5	8	8	
	5.0	6	8	8	6	10	10	
	6.0	8	10	10	8	12 • 14	12	
	8.0	10	12	12	10	16	16	
	10.0	12	14 • 16	—	12	20	20	
	12.0	14	20	—	14	24	—	
	14.0	16	—	—	16	—	—	
	17.0	20	—	—	22	—	—	
	19.0	24	—	—	24	—	—	

# CHESCO® Hex Tool Key Length Chart

Nominal Key Size	HEX-END			BALL-END	
	Length of Short Arm	Length of Long Arm		Length of Short Arm	Length of Long Arm
FRACTIONAL		Short Arm Series	Long Arm Series		
0.028	0.219	1.219	NA	NA	NA
0.035	0.344	1.219	NA	NA	NA
0.05	0.532	1.656	2.844	0.581	2.894
1/16	0.563	1.750	3.000	0.625	3.063
5/64	0.610	1.875	3.188	0.687	3.265
3/32	0.656	2.000	3.375	0.739	3.469
7/64	0.703	2.125	3.563	0.812	3.671
1/8	0.750	2.250	3.750	0.875	3.875
9/64	0.797	2.375	3.938	0.938	4.108
5/32	0.844	2.500	4.125	1.000	4.381
3/16	0.938	2.750	4.500	1.125	4.688
7/32	1.032	3.000	4.875	1.250	5.094
1/4	1.125	3.250	5.250	1.375	5.500
5/16	1.250	3.750	6.000	1.563	6.313
3/8	1.375	4.250	6.750	1.750	7.125
7/16	1.500	4.750	7.500	NA	NA
1/2	1.625	5.250	8.250	NA	NA
9/16	1.750	5.750	9.000	NA	NA
5/8	1.875	6.250	9.750	NA	NA
3/4	2.125	7.250	11.250	NA	NA
7/8	2.375	8.250	12.750	NA	NA
1	2.625	9.250	14.250	NA	NA

Nominal Key Size	TORX®	
FRACTIONAL	Length of Short Arm	Length of Long Arm
T-6	0.676	2.004
T-7	0.686	2.109
T-8	0.700	2.138
T-9	0.707	2.161
T-10	0.764	2.373
T-15	0.832	2.519
T-20	0.902	2.667
T-25	0.971	2.893
T-27	1.040	3.025
T-30	1.155	3.248
T-40	1.294	3.606
T-45	1.433	4.058
T-50	1.598	4.566
T-55	1.817	5.191

Nominal Key Size	HEX-END			BALL-END	
	Length of Short Arm	Length of Long Arm		Length of Short Arm	Length of Long Arm
METRIC		Short Arm Series	Long Arm Series		
0.7	5.5	31.0	NA	NA	NA
0.9	8.5	31.0	NA	NA	NA
1.3	13.5	41.5	72.0	NA	NA
1.5	13.5	44.0	77.0	15.0	78.5
2	15.5	49.0	82.0	17.5	84.0
2.5	17.5	54.5	88.5	20.0	91.0
3	19.0	61.5	98.5	22.0	101.5
4	24.0	68.0	104.0	26.0	114.0
4.5	25.0	70.0	NA	NA	NA
5	27.0	78.0	116.0	32.0	124.0
5.5	28.0	88.0	NA	NA	NA
6	31.0	88.0	138.0	37.0	145.0
7	33.0	95.0	153.5	NA	NA
8	35.0	97.5	157.5	43.0	170.0
9	37.0	108.0	162.0	NA	NA
10	39.0	109.0	167.0	49.0	197.0
12	44.0	122.0	209.0	NA	NA
14	54.0	136.5	232.5	NA	NA
17	61.5	156.0	246.0	NA	NA
19	68.5	175.5	275.5	NA	NA

# Marking Tools

Chalk Reels

Chalk

Pencils

Crayons

Flagging Tapes

Barrier Tapes

Stake Flags

Plumb Bobs





# STRAIT-LINE® MARKING TOOLS

## SPEED-LINE® Fast Retrieve Chalk Reels

**Crank Handle Clutch Release**

- Allows line release without spinning crank handle

**Innovative Case Design**

- Smaller design for comfort and easier handling, and plumb bob applications

**High-Tensile Strength Self-Chalking Cord**

**Steel-Plated Hook**

- Designed for stable anchoring



**Retractable Handle**

- Built of tough glass-reinforced nylon

**ABS-Impact Resistant Casing**

- Built tough, durable and lightweight

**Hook Storage/Door Locking Mechanism**

- Virtually eliminates spills and line tangles

Description	Carded Stock #	Bulk Stock #
100' / 30 M	64310	64311

## Metal Case Chalk Reels

**Durable Aluminum Alloy Construction**

**Large Grip Anchor Ring**



**Case Doubles as Plumb Bob – Plumb Line**

**Metal Handle**

- Self-locking on all reels

**Slide Fill Opening**

- Leak-proof

Description	Carded Stock #	Bulk Stock #
50' / 15 M	63950	64050
100' / 30 M	64110	64111

## Mini Chalk Reels

**Reel Holds Approximately 1 oz. of Chalk**

**Requires No Tools to Replace Line**

- High tensile strength self chalking cord



**Large Easy-Fill Opening Doubles as Plumb Bob**

**Plastic Case**

- High impact resistant
- Unit 24% smaller than standard aluminum reel

Description	Carded Stock #	Bulk Stock #
25' / 7.5 M	64125	64126



# STRAIT-LINE® MARKING TOOLS

## Chalk Refills Standard

Description	Bulk Stock #
4 oz. / 113 g - Blue	64801
4 oz. / 113 g - Red	64802
4 oz. / 113 g - Yellow	64803
4 oz. / 113 g - White	64804
4 oz. / 113 g - Fluorescent Orange	64805
4 oz. / 113 g - Fluorescent Green	64806
8 oz. / 227 g - Blue	64901
8 oz. / 227 g - Red	64902
8 oz. / 227 g - Yellow	64903
8 oz. / 227 g - White	64904
8 oz. / 227 g - Fluorescent Orange	64905
8 oz. / 227 g - Fluorescent Green	64907
8 oz. / 227 g - Jet Black	64908
2.5 lb. / 1.13 kg - Blue	65201
2.5 lb. / 1.13 kg - Red	65202
2.5 lb. / 1.13 kg - Fluorescent Orange	65205
5 lb. / 2.26 kg - Blue	65101
5 lb. / 2.26 kg - Red	65102
5 lb. / 2.26 kg - Yellow	65103
5 lb. / 2.26 kg - White	65104
5 lb. / 2.26 kg - Fluorescent Orange	65105
5 lb. / 2.26 kg - Fluorescent Green	65106
50 lb. / 22.6 kg - Fiber Drum - Blue	65301
50 lb. / 22.6 kg - Fiber Drum - Red	65302
50 lb. / 22.6 kg - Fiber Drum - Yellow	65303
50 lb. / 22.6 kg - Fiber Drum - White	65304



64802



64907



65101



65205

Marking Tools

## Chalk Refills Concentrated

Description	Bulk Stock #
8 oz. / 227 g - Blue	64901SLPE
8 oz. / 227 g - Red	64902SLPE
4 lb. / 1.81 kg - Blue	65101SLPE
4 lb. / 1.81 kg - Red	65102SLPE

Description	Contents	Bulk Stock #
18 pc	8 oz. / 227 g - 6 each Blue, Red, Orange	64900
12 pc	8 oz. / 227 g - 6 each Blue, Red	64906

## Chalk Assortment

# STRAIT-LINE® MARKING TOOLS

## Combo Sets



64490



64499



64494

Description	Carded Stock #
25' / 7.5 M Mini Reel and 4 oz. Blue Chalk Combo	64490
25' / 7.5 M Mini Reel and 4 oz. Red Chalk Combo	64491
25' / 7.5 M Mini Reel and 4 oz. Orange Chalk Combo	64492
100' / 30 M SPEED-LINE® Reel and 4 oz. Blue Chalk	64494
100' / 30 M SPEED-LINE Reel and 4 oz. Red Chalk	64495
100' / 30 M SPEED-LINE Reel and 4 oz. Orange Chalk	64496
100' / 30 M STRAIT-LINE® Reel and 4 oz. Orange Chalk	64497
100' / 30 M STRAIT-LINE Reel and 4 oz. Red Chalk	64498
100' / 30 M STRAIT-LINE Reel and 4 oz. Blue Chalk	64499

## Replacement Lines



64610

Description	Bulk Stock #
25' / 7.5 M	64525*
50' / 15 M	64550
100' / 30 M	64610

\*Spool included

## Standard Flagging Tapes



65901

Description	Bulk Stock #
300' / 90 M - Red	65901
300' / 90 M - Orange	65902
300' / 90 M - Blue	65903
300' / 90 M - White	65904
300' / 90 M - Yellow	65905

## Fluorescent Flagging Tapes



65601

Description	Bulk Stock #
150' / 45 M - Glo - Red	65601
150' / 45 M - Glo - Orange	65602
150' / 45 M - Glo - Pink	65603
150' / 45 M - Glo - Lime	65604

## Flagging Tape Assortment

Description	Contents	Bulk Stock #
24 pc Standard	6 each - Red, Orange, Blue, Yellow	65910
24 pc Fluorescent	6 each - Red, Orange, Pink, Lime	65610

# STRAIT-LINE® MARKING TOOLS

## Barrier Tapes

Description	Bulk Stock #
300' x 3" / 90 M x 76 mm - CAUTION	66200
300' x 3" / 90 M x 76 mm - POLICE LINE - DO NOT CROSS	66201
300' x 3" / 90 M x 76 mm - DANGER - DO NOT ENTER	66202
300' x 3" / 90 M x 76 mm - CAUTION - LINE BURIED BELOW	66220
300' x 3" / 90 M x 76 mm - WET PAINT	66222
1000' x 3" / 300 M x 76 mm - CAUTION - CONSTRUCTION AREA	66211
1000' x 6" / 300 M x 152 mm - CAUTION - LINE BURIED BELOW	66230
1000' x 3" / 300 M x 152 mm - CAUTION	66231



66200



66202

## Stake Flags

Description	Bulk Stock #
Glo - Orange	64100
Glo - Pink	64101
Glo - Lime	64102



Marking Tools



66451

## China Markers

Description	Bulk Stock #
White	66450
Black	66451
Red	66452



66500

66401



## Marking Crayons and Holders

Description	Carded Stock #	Bulk Stock #
Red	—	66401
Blue	—	66402
Green	—	66403
Black	—	66404
White	—	66405
Yellow	—	66406
6 pc Red	66501	—
6 pc Blue	66502	—
6 pc Green	66503	—
6 pc Black	66504	—
6 pc White	66505	—
6 pc Yellow	66506	—
Lumber Crayon Holder	66510	66500



# STRAIT-LINE® MARKING TOOLS

## Marking Tools



64601



66100

Description	Bulk Stock #
Half Moon Carpenter Chalk - Blue	64601
Soapstone	66100

## Carpenter Pencils



66300

Description	Bulk Stock #
Medium Lead	66300
Soft Lead	66301
Medium Lead - Box of 72	66305SL
Hard Lead	66302
3 pc Medium Lead	66399
6 pc Medium Lead	66400

## Hexagon Plumb Bobs



11908

Description	Carded Stock #	Bulk Stock #
3 oz. / 8.5 g	13030	11903
5 oz. / 142 g	13055	11905
8 oz. / 227 g	13085	11908
12 oz. / 340 g	13125	11912
16 oz. / 454 g	-	11916

# Hand Saws

**JACKPRO®**

*Hand Saws*

**JACK XPERT™**

*Hand Saws*

**JACKPLUS®**

*Hand Saws*

**Specialty Saws**

**Garden Assortment**



# JACKPRO® HAND SAWS

## Extra Thick Blade

- 1 mm thick blade for maximum stability and safety

## Extra-Fine Tooth Design

- Cuts both across and with the grain for ease of cutting

## User-Friendly Hardwood Handle

- Designed with ergonomics in mind for excellent grip and user comfort with less hand fatigue; handle slot is large enough to use with or without glove



## Hard Point Teeth

- Stay sharper longer with no re-sharpening needed – saves time and money

## Heavy-Duty Protective Blade Cover

- Keeps the teeth protected for longer life and from damage

## Hard Wood Handle - Hard Point Teeth

- JACK™ hand saws have diamond-ground razor-sharp teeth that cut 40% faster than a traditional punched and filed saw

Description				Stock #
15" / 375 mm	8 P	Aggressive Teeth		766PHP-375
20" / 500 mm	8 P	Aggressive Teeth		766PHP-500
20" / 500 mm	10 P	Universal Teeth		788UHP-500
26" / 650 mm	8 P	Universal Teeth		788UHP-650
26" / 650 mm	9 T - 10 P	Universal Teeth		799UHP-650

## Specialty Saws



Description				Stock #
12" / 300 mm	8 P	Compass Saw		7126HP-300
14" / 350 mm	12 P	Back Saw		7136HP-350



**SAFETY INSTRUCTIONS:** Failure to follow warnings may result in bodily injury.  
**WARNING:** ALWAYS wear safety goggles to protect your eyes and wear other appropriate safety items for protection.

# JACK XPERT™ HAND SAWS

## High Quality Steel Blade

- Manufactured of C75 steel and diamond-ground for razor-sharp cutting; cuts on both push and pull stroke

## Square and Miter Feature

- Built into saw handle enables user to draw 45° and 90° lines using the back of the blade

## No-Slip Comfortable Grip

## Heavy-Duty Protective Blade Cover

- Keeps the teeth protected for longer life and from damage

## Hard Point Teeth

- Stay sharper longer with no re-sharpening needed – saves time and money



Hand Saws

## No-Slip Grip Handle - Hard Point Teeth

Description				Stock #
14" / 350 mm	8 P	Universal Teeth		XP201-350
15" / 375 mm	8 P	Aggressive Teeth		XP216-375
20" / 500 mm	8 P	Universal Teeth		XP201-500
26" / 650 mm	8 P	Universal Teeth		XP201-650



XP2055-300



XP2049-325

## Specialty Saws

Description				Stock #
12" / 300 mm	13 P	Very Fine Teeth Back Saw		XP2055-300
13" / 325 mm	13 P	Very Fine Teeth Veneer Saw		XP2049-325
12" / 300 mm	8 P	Universal Keyhole Saw		XP2047-300



XP2047-300



# JACKPLUS® HAND SAWS

**Premium .85 mm Thick Steel**  
• For better stability while cutting

**High Quality Steel Blade**  
• Manufactured of C75 steel and diamond-ground for razor-sharp cutting; cuts on both push and pull stroke

**Square and Miter Feature**  
• Built into saw handle enables user to draw 45° and 90° lines using the back of the blade



**Extra-Fine Tooth Design**  
• Cuts both across and with the grain for ease of cutting

**Heavy-Duty Protective Blade Cover**  
• Keeps the teeth protected for longer life and from damage

**Hard Point Teeth**  
• Stay sharper longer with no re-sharpening needed – saves time and money

Hand Saws

## Plastic Handle - Hard Point Teeth

• JACK™ hand saws have diamond-ground razor-sharp teeth that cut 40% faster than a traditional punched and filed saw

Description				Stock #
13-1/2" / 338 mm	12 P	Very Fine Teeth		99UHP-335J
14" / 350 mm	8 P	Universal Teeth		188UHP-350
15" / 375 mm	8 P	Aggressive Teeth		166PHP-375
20" / 500 mm	8 P	Universal Teeth		188UHP-500
26" / 650 mm	8 P	Universal Teeth		188UHP-650

## Specialty Saws



1126HP-300



1130HP-325



1136HP-300

Description				Stock #
12" / 300 mm	12 P	Back Saw		1136HP-300
12" / 300 mm	12 P	Compass Saw		1126HP-300
13" / 325 mm	12 P	Veneer Saw		1130HP-325

# JACK™ HAND SAWS

## Specialty Saws



13J

Description	Stock #
10" / 250 mm Dovetail Saw w/ Reversible Handle	13J
6" / 150 mm Drywall Saw	106-150
6" / 150 mm Coping Saw	108-150



108-150



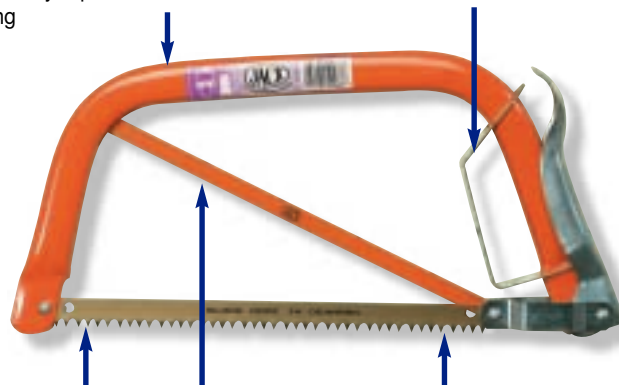
## Combi-Saw

### High Frequency Welded Frame

- Excellent stability equals no flex and faster cutting

### Knuckle-Guard

- Protects your fingers when sawing



### High Quality Wood and Metal Blades

- Flexibility to cut either wood, PVC, or metal material

### Hard Point Teeth

- Stay sharper longer and need no re-sharpening

Description	Stock #
12" / 317 mm Combi-Saw w/ Wood and Metal Blade	218HP-300
12" / 317 mm Replacement Blade	18HP-317



18HP-317

# JACK™ GARDEN ASSORTMENT

## Pruning Saws

- Designed for cutting on the pull stroke



172P-330

Description		Stock #
13-1/2" / 343 mm	Straight - with Hard Point Teeth	142HP-343
13" / 330 mm	Curved	172P-330

## Bow Saws

- Hard point teeth



157-24HP-533

Description		Stock #
21" / 533 mm		157-24HP-533
24" / 610 mm		224HP-610
30" / 762 mm		224HP-762
36" / 914 mm		224HP-914

## Bow Saw Replacement Blades

- Hard point teeth



24HP-533

Description	Cutting	Stock #
21" / 533 mm	Wet / Green Wood	24HP-533
21" / 533 mm	Dry Wood	UB3020-533
24" / 610 mm	Wet / Green Wood	24HP-610
30" / 762 mm	Wet / Green Wood	24HP-762
36" / 914 mm	Wet / Green Wood	24HP-914

# Saw Blades

Thin Kerf Circular  
Saw Blades

Circular Saw Blades

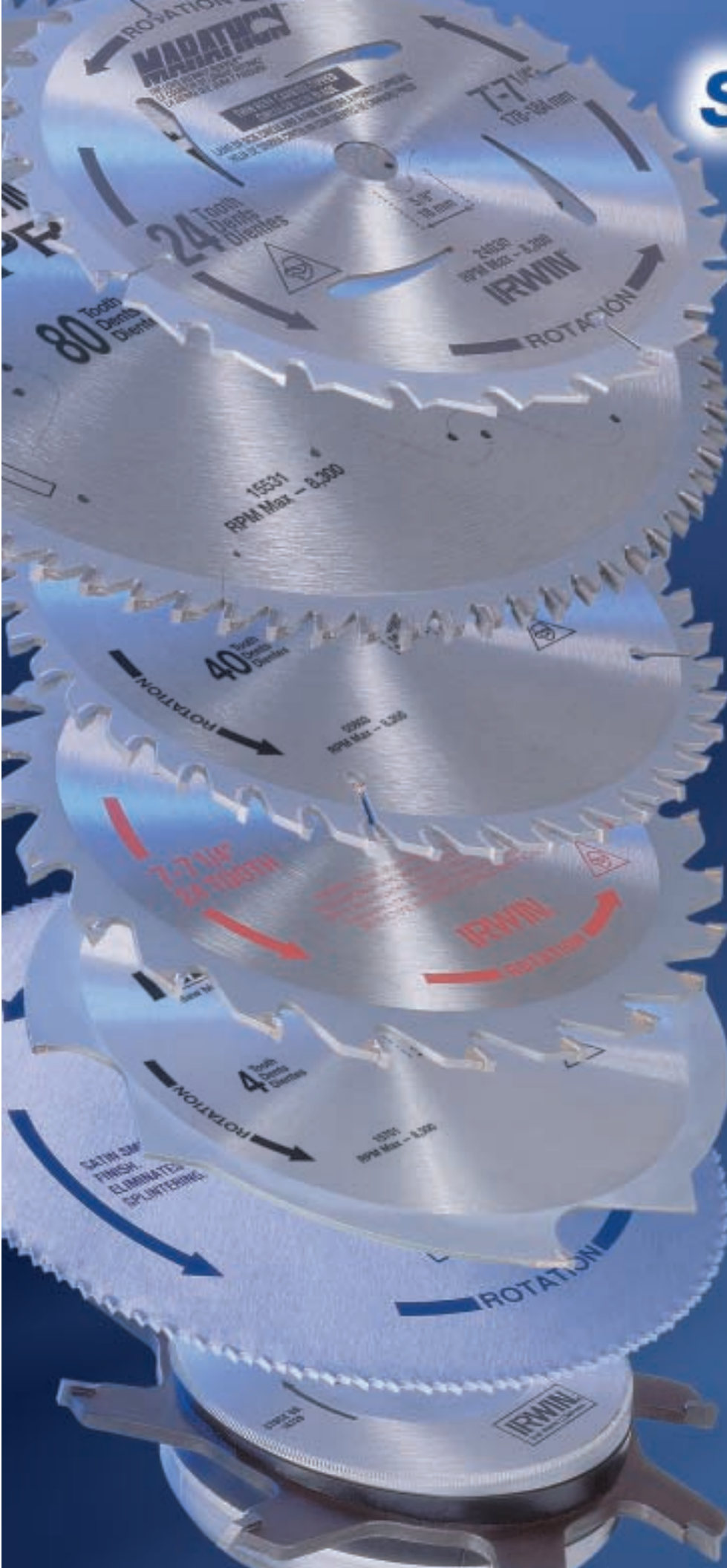
Dado Blades

Jig Saw Blades

Reciprocating Saw  
Blades

Hole Saw Blades

Abrasive Wheels





# MARATHON® THIN KERF CIRCULAR SAW BLADES

Designed Tough and Long Lasting for the Professional

## Hardened Plate

- Runs truer, avoids warping

## Unique Shoulder Design

- More support behind each tooth, consistent chip removal

## Thin Kerf

- Provides faster, cleaner cutting action

## C3 Carbide Tips

- For longer life, impact resistant

## Specially Engineered Heat Vents

- Reduces heat and resin build-up which can lead blade to binding and warping

## Arbor Hole Perfectly Centered

- Ensures a true running blade and consistent chip removal

- A blend of precision design and engineering, exacting tolerances, and unparalleled production quality is what makes MARATHON® blades last far longer than conventional blades

## Tooth Design:



## Alternate Top Bevel Tooth Grind (ATB)

- For cross cutting and ripping in all woods
- Tooth top is alternately beveled at a 15° angle to the blade axis
- The sharp points on the extremity cut the material with a shearing action, alternating from one side to the other, producing a clean smooth finish cut



**SAFETY INSTRUCTIONS:** Failure to follow warnings may result in bodily injury.  
**WARNING:** ALWAYS wear safety goggles to protect your eyes and wear other appropriate safety items for protection.

# MARATHON® THIN KERF CIRCULAR SAW BLADES

## For Wood - Framing / Ripping

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #	Bulk Stock #
3-3/8" / 86 mm	20	15 mm	.043" / 1.1 mm	16°	ATB	14000	–
5-1/2" / 140 mm	16	Universal	.067" / 1.7 mm	20°	ATB	14010	–
5-1/2" / 140 mm	24	Universal	.067" / 1.7 mm	20°	ATB	14011	–
5-3/8" / 137 mm	20	10 mm	.067" / 1.7 mm	20°	ATB	14015	–
6-1/2" / 165 mm	20	Universal	.067" / 1.7 mm	20°	ATB	14020	24020
7-1/4" / 184 mm	18	Universal	.067" / 1.7 mm	20°	ATB	14028	24028
7-1/4" / 184 mm	24	Universal	.067" / 1.7 mm	20°	ATB	14030	24030
7-1/4" / 184 mm	24	Universal	.078" / 2.0 mm	20°	ATB	14130**	24130**

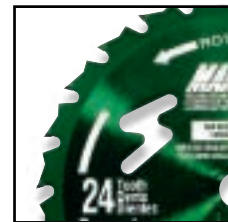


14030

- Most popular all-purpose blade for ripping and crosscut
- Small number of teeth for fast cutting when smooth finish is not needed
- Ideal blade for house framing
- Alternate top bevel grind

## For Wood - Trim / Finish

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #	Bulk Stock #
6-1/2" / 165 mm	40	Universal	.067" / 1.7 mm	20°	ATB	14023	–
7-1/4" / 184 mm	40	Universal	.067" / 1.7 mm	20°	ATB	14031	24031
8" / 203 mm	30	Universal	.078" / 2.0 mm	20°	ATB	14050	–
8-1/4" / 210 mm	30	Universal	.078" / 2.0 mm	20°	ATB	14051	–
8-1/4" / 210 mm	40	Universal	.078" / 2.0 mm	15°	ATB	14053	–
9" / 230 mm	36	5/8"	.086" / 2.2 mm	20°	ATB	14060	–
10" / 254 mm	36	5/8"	.084" / 2.1 mm	20°	ATB	14070	24070
10" / 254 mm	36	5/8"	.102" / 2.6 mm	20°	ATB	14170**	–
12" / 305 mm	36	1"	.106" / 2.7 mm	20°	ATB	14080	–



14130

- Silicone coated
- For applications in pressure treated lumber
- Allows blades to slice easier through material reducing pitch and resin build-up

## For Wood - Satin Smooth Finish

Diameter	No. of Teeth	Arbor Hole	Kerf	Grind *	Carded Stock #	Bulk Stock #
8-1/4" / 210 mm	60	Universal	.078" / 2.0 mm	ATB	14055	–
10" / 254 mm	60	5/6"	.084" / 2.1 mm	ATB	14074	–
10" / 254 mm	80	5/6"	.084" / 2.1 mm	ATB	14076	–
12" / 305 mm	60	1"	.106" / 2.7 mm	ATB	14082	–
12" / 305 mm	80	1"	.106" / 2.7 mm	ATB	14084	–



14070

- For general purpose use when cross-cutting and trimming in all woods, paneling, plywood and chipboard
- Alternate top bevel grind

## Sets

Description	Contents	Carded Stock #
2 Pack	7-1/4" / 184 mm x 24T and 10" / 254 mm x 36T	14032
3 Pack	7-1/4" / 184 mm x 24T	24033
3 Blades w/ Caddy	7-1/4" / 184 mm x 24T	240303C
6 Blades w/ Caddy	7-1/4" / 184 mm x 24T	240306C

## Prepacks

Description	Contents	Stock #
25 pc	14030	65629
25 pc	14130	65630
2 Pack	7-1/4" / 184 mm Blade 52-14030	65643
2 Pack	10" / 254 mm Blade 26-14070	65644
25 pc	14031	65649
13 pc	14032	65667



14076

- Satin-smooth finish on all woods, rip or crosscut
- Reduces sanding after cutting
- Ideal for finish carpentry like furniture and cabinets
- Alternate top bevel grind

\*Alternate Top Bevel Grind    \*\*Silicone Coated

# IRWIN PREMIUM™ CIRCULAR SAW BLADES

Designed for Demanding Woodworkers,  
Professionals, and Industrial Applications

## Anti-Vibration Laser Slots

- For exacting cuts and to reduce vibrations

## C4 Tungsten Carbide Tip

- For longer cutting life

## Hardened and Tempered Body

- For life and accuracy



## Diamond Sharpened Tips

- For smoother and more accurate cuts

## Laser Cut Expansion Slots

- To reduce heat

## Precision Balanced and Tensioned Plate

- For superior performance

## Tooth Designs:



### Alternate Top Bevel Grind (ATB)

- For cross cutting and ripping in all woods
- Tooth top is alternately beveled at a 15° angle to the blade axis
- The sharp points on the extremity cut the material with a shearing action, alternating from one side to the other, producing a clean smooth finish cut



### Triple Chip Grind (TCG)

- For cutting non-ferrous metals and plastic
- Alternate tooth design where one tooth is ground with a square top, and the next has both corners beveled at 45°
- A dual cutting action is created whereby the beveled tooth acts as a router and is followed by the square top tooth which finishes and cleans the cut



### Square Top Tooth Grind (ST)

- For heavy-duty cutting



# IRWIN PREMIUM™ CIRCULAR SAW BLADES

## For Wood - Rip

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #
8" / 203 mm	24	Universal	.110" / 2.8 mm	20°	ST	56230
9" / 230 mm	24	5/8"	.118" / 3.0 mm	20°	ST	56240
10" / 254 mm	24	5/8"	.118" / 3.0 mm	20°	ST	56250



56250

- For use when cross-cutting and trimming all woods... paneling, plywood, chipboard

## For Wood - Cutoff

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #
8" / 203 mm	60	Universal	.110" / 2.8 mm	10°	ATB	56330
9" / 230 mm	60	5/8"	.118" / 3.0 mm	10°	ATB	56340
10" / 254 mm	60	5/8"	.118" / 3.0 mm	10°	ATB	56350
10" / 254 mm	80	5/8"	.118" / 3.0 mm	10°	ATB	56450
12" / 305 mm	60	1"	.126" / 3.2 mm	10°	ATB	56360
14" / 356 mm	60	1"	.134" / 3.4 mm	10°	ATB	56370
14" / 356 mm	80	1"	.134" / 3.4 mm	10°	ATB	56470
16" / 406 mm	60	1"	.141" / 3.6 mm	10°	ATB	56380



56350

- Finest combination blade for cutting across and with the grain of hard and soft woods

## For Wood - Combination

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #
8" / 203 mm	40	Universal	.110" / 2.8 mm	10°	ATB	56530
9" / 230 mm	40	5/8"	.118" / 3.0 mm	10°	ATB	56540
10" / 254 mm	50	5/8"	.118" / 3.0 mm	10°	ATB	56550
12" / 305 mm	60	1"	.126" / 3.2 mm	10°	ATB	56560

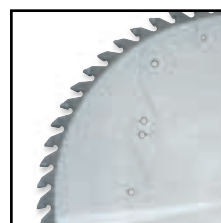


56550

- General purpose blade for cross-cutting and ripping of soft and hard woods, veneers, plywood and composition board

## For Wood - General Purpose

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #
8" / 203 mm	40	Universal	.110" / 2.8 mm	20°	ATB	56730
9" / 230 mm	40	5/8"	.118" / 3.0 mm	20°	ATB	56740
10" / 254 mm	40	5/8"	.118" / 3.0 mm	20°	ATB	56750



56750

- For cutting all types of non-ferrous metals such as aluminum, brass, copper and lead: except steel and iron

## For Non-Ferrous Metal

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #
8" / 203 mm	60	Universal	.110" / 2.8 mm	5°	TCG	56630
9" / 230 mm	60	5/8"	.118" / 3.0 mm	5°	TCG	56640
10" / 254 mm	60	5/8"	.118" / 3.0 mm	5°	TCG	56650
10" / 254 mm	80	5/8"	.118" / 3.0 mm	5°	TCG	56660



56660

- For cutting all types of plastics including polystyrene, plexiglass, laminates and similar materials

## For Plastics

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #
8" / 203 mm	60	Universal	.110" / 2.8 mm	10°	TCG	56830
9" / 230 mm	60	5/8"	.118" / 3.0 mm	10°	TCG	56840
10" / 254 mm	60	5/8"	.118" / 3.0 mm	10°	TCG	56850
10" / 254 mm	80	5/8"	.118" / 3.0 mm	10°	TCG	56860

\* ST = Square Top Tooth Grind, ATB = Alternate Top Bevel Grind, TCG = Triple Chip Grind



# IRWIN PRO™ CIRCULAR SAW BLADES

Built Tough for the  
Contractor's Everyday Use

Heat Treated Steel  
• For extra strength

Industrial Grade  
Carbide Tip  
• For longer life



Expansion Slots  
• Reduce warping and  
dissipate heat

Resharpenable  
• Heavy-duty carbide teeth

Computer Assisted Design  
and Manufacturing

Tooth Designs:



## Alternate Top Bevel Grind (ATB)

- For cross cutting and ripping in all woods
- Tooth top is alternately beveled at a 15° angle to the blade axis
- The sharp points on the extremity cut the material with a shearing action, alternating from one side to the other, producing a clean smooth finish cut



## Triple Chip Grind (TCG)

- For cutting non-ferrous metals and plastic
- Alternate tooth design where one tooth is ground with a square top, and the next has both corners beveled at 45°
- A dual cutting action is created whereby the beveled tooth acts as a router and is followed by the square top tooth which finishes and cleans the cut



# IRWIN PRO™ CIRCULAR SAW BLADES

## For Wood - Framing/Ripping

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Stock #
10" / 254 mm	24	5/8"	.122" / 3.1 mm	21°	ATB	55819
12" / 305 mm	24	1"	.134" / 3.4 mm	22°	ATB	55824



55801

- General-purpose blade for crosscutting in hard wood, soft wood, plywood and composition board
- Alternate top bevel tip grind

## For Wood - Combination

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Stock #
7-1/4" / 184 mm	35	Universal	.122" / 3.1 mm	11°	Comb.	55802
8-1/4" / 210	35	Universal	.122" / 3.1 mm	12°	Comb.	55813
9" / 230 mm	40	5/8"	.122" / 3.1 mm	12°	Comb.	55806
10" / 254 mm	50	5/8"	.122" / 3.1 mm	13°	Comb.	55807

## For Wood - General Purpose

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #
7-1/4" / 184 mm	24	Universal	.106" / 2.7 mm	18°	ATB	55801
8-1/4" / 210 mm	24	Universal	.122" / 3.1 mm	20°	ATB	55804
10" / 254 mm	40	5/8"	.122" / 3.1 mm	13°	ATB	55820
12" / 305 mm	40	1"	.134" / 3.4 mm	15°	ATB	55825



55820

- General-purpose blade for use in cross-cutting and trimming in most woods
- Alternate top bevel tip grind

Saw Blades

## For Wood - Trim/Finish

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #
7-1/4" / 184 mm	40	Universal	.106" / 2.7 mm	12°	ATB	55803
8-1/4" / 210 mm	40	Universal	.106" / 2.7 mm	17°	ATB	55805
10" / 254 mm	100	5/8"	.122" / 3.1 mm	0°	ATB	55823

## For Wood - Satin Smooth Finish

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #
7-1/4" / 184 mm	60	Universal	.106" / 2.7 mm	15°	ATB	55811
8-1/4" / 210 mm	60	5/8"	.122" / 3.1 mm	17°	ATB	55814
8-1/4" / 210 mm	80	5/8"	.106" / 2.7 mm	2°	ATB	55815
9" / 230 mm	60	5/8"	.122" / 3.1 mm	13°	ATB	55818
10" / 254 mm	80	5/8"	.122" / 3.1 mm	10°	ATB	55822
12" / 305 mm	60	1"	.134" / 3.4 mm	17°	ATB	55827
12" / 305 mm	80	1"	.134" / 3.4 mm	17°	ATB	55828



55810

- For cutting various types of non-ferrous metals and plastics
- Triple chip tip grind

## For Non-Ferrous Metal/Plastics

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #
7-1/4" / 184 mm	48	Universal	.106" / 2.7 mm	1°	TCG	55810
8" / 203 mm	40	5/8"	.102" / 2.6 mm	0°	TCG	55812
10" / 254 mm	60	5/8"	.122" / 3.1 mm	13°	TCG	55821
10" / 254 mm	80	5/8"	.122" / 3.1 mm	-4°	TCG	55809
10" / 254 mm	100	5/8"	.122" / 3.1 mm	0°	TCG	55846
12" / 305 mm	80	1"	.134" / 3.4 mm	-2°	TCG	55830

## Rescue Blade

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #
12" / 305 mm	12	1"	.134" / 3.4 mm	0°	ATB	55911

\*ATB = Alternate Top Bevel Grind, TCG = Triple Chip Grind

# SPRINT® CIRCULAR SAW BLADES

Quality General Purpose Blades for Do-It-Yourselfers and Contractors

## Hardened Saw Steel

- Extra strength and eliminates warping

## Precision Ground Teeth

- Smooth, accurate cuts

Saw Blades

## Tungsten Tough Carbide Tipped

- Lasts up to 50 times longer than conventional steel blades

## Corrosion Resistant Coating

- Longer quality performance

## Computer Assisted Design and Manufacturing

- Precise cutting in all applications, and for both rip and crosscut operations



## Alternate Top Bevel Tooth Grind (ATB)

- For cross cutting and ripping in all woods



## Triple Chip Tooth Grind (TCG)

- For cutting non-ferrous metals and plastic



## Square Top Tooth Grind (ST)

- For heavy-duty cutting

# SPRINT® CIRCULAR SAW BLADES

## For Wood – Framing /Ripping Combination

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #	Bulk Stock #
4-3/8" / 111 mm	12	20 mm	.086" / 2.2 mm	18°	ST	15008	–
4-1/2" / 114 mm	12	3/8"	.088" / 2.2 mm	18°	ST	15090	–
5-1/2" / 140 mm	12	Universal	.088" / 2.2 mm	18°	ST	15010	–
6-1/2" / 165 mm	12	Universal	.088" / 2.2 mm	18°	ST	15020	–
7-1/4" / 184 mm	16	Universal	.088" / 2.2 mm	18°	ST	15030	25030
8" / 203 mm	16	Universal	.088" / 2.2 mm	15°	ST	15050	–
9" / 229 mm	18	5/8"	.118" / 3.0 mm	15°	ST	15060	–
10" / 254 mm	24	5/8"	.118" / 3.0 mm	15°	ST	15070	–
12" / 305 mm	24	1"	.128" / 3.3 mm	15°	ST	15080	–
7-1/4" / 184 mm	20	Universal	.088" / 2.2 mm	23°	ST	15531	25531



15030

- A very popular all-purpose blade for ripping and crosscut
- Small number of teeth for fast cutting when smooth finish is not needed
- Ideal blade for house framing
- Alternate top bevel grind

## For Wood – General Purpose

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #	Bulk Stock #
6-1/2" / 165 mm	24	Universal	.106" / 2.7 mm	15°	ATB	15120	25120
7-1/4" / 184 mm	24	Universal	.106" / 2.7 mm	15°	ATB	15130	25130
8" / 203 mm	24	Universal	.106" / 2.7 mm	15°	ATB	15150	25150
9" / 229 mm	30	5/8"	.122" / 3.1 mm	15°	ATB	15160	–
10" / 254 mm	36	5/8"	.122" / 3.1 mm	15°	ATB	15170	–



15130

- General purpose blade for crosscutting in hard and soft woods
- Can also be used in cutting plywood and composition board
- Alternate top bevel grind

## For Wood - Trim and Finish

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #	Bulk Stock #
5-1/2" / 140 mm	30	1/2"	.088" / 2.2 mm	12°	ATB	15210	–
6-1/2" / 165 mm	30	Universal	.088" / 2.2 mm	12°	ATB	15220	–
7-1/4" / 184 mm	40	Universal	.088" / 2.2 mm	12°	ATB	15230	25230
8" / 203 mm	40	Universal	.088" / 2.2 mm	12°	ATB	15250	–
9" / 229 mm	40	5/8"	.088" / 2.2 mm	12°	ATB	15260	–
10" / 254 mm	40	5/8"	.106" / 2.7 mm	12°	ATB	15270	25270
12" / 305 mm	40	1"	.129" / 3.3 mm	12°	ATB	15280	–



15230

- For general purpose use when cross-cutting and trimming all woods, paneling, plywood and chipboard
- Alternate top bevel grind

## For Wood - Satin-Smooth Finish

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind*	Carded Stock #
8" / 203 mm	60	Universal	.088" / 2.2 mm	10°	ATB	15350
9" / 229 mm	60	5/8"	.106" / 2.7 mm	10°	ATB	15360
10" / 254 mm	60	5/8"	.106" / 2.7 mm	10°	ATB	15370



15370

- Satin-smooth finish on all woods, rip or crosscut
- Reduces sanding after cutting
- Ideal for finish carpentry like furniture and cabinets
- Alternate top bevel grind

\* ST = Square Top Grind, ATB = Alternate Top Bevel



# SPRINT® CIRCULAR SAW BLADES

## For Wood - Nail Cutter

Description	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #
6-1/2" / 165 mm	12	Universal	.118" / 3.0 mm	-5°	ST	15420
7-1/4" / 184 mm	14	Universal	.118" / 3.0 mm	-5°	ST	15440
8" / 203 mm	18	Universal	.118" / 3.0 mm	-5°	ST	15450
10" / 254 mm	24	5/8"	.118" / 3.0 mm	-5°	ST	15470



15440

- For tough cutting jobs in nail-embedded wood
- Square top grind

## For Plastics

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #
7-1/4" / 184 mm	40	Universal	.088" / 2.2 mm	0°	TCG	15830
8" / 203 mm	60	Universal	.088" / 2.2 mm	0°	TCG	15850
9" / 229 mm	60	5/8"	.114" / 2.9 mm	0°	TCG	15860
10" / 254 mm	60	5/8"	.108" / 2.7 mm	0°	TCG	15870



15870

- For cutting all types of plastics including polystyrene, plexiglass, laminates and similar materials
- Triple chip grind

## For Non-Ferrous Metal

Diameter	No. of Teeth	Arbor Hole	Kerf	Hook Angle	Grind *	Carded Stock #
7-1/4" / 184 mm	40	Universal	.088" / 2.2 mm	0°	TCG	15530
8" / 203 mm	60	Universal	.118" / 3.0 mm	0°	TCG	15550
9" / 229 mm	60	5/8"	.106" / 2.7 mm	0°	TCG	15560
10" / 254 mm	60	5/8"	.114" / 2.9 mm	0°	TCG	15570



15570

- For cutting all types of non-ferrous metals such as aluminum, brass, copper and lead
- Do not use on ferrous metals such as steel and iron
- Triple chip grind

## 30 Blades - Contractor Pack

Diameter	No. of Teeth	Arbor Hole	Stock #
7-1/4" / 184 mm	24	Universal	25136

## Prepacks

Description	Contents	Stock #
25 pc	15130 - For Wood - Master Combination	65648
25 pc	15270 - For Wood - Trim and Finish	65654
25 pc	15370 - For Wood - Satin - Smooth Finish	65655

\* ST = Square Top Grind, TCG = Triple Chip Grind

# FIBERCUT™ CARBIDE CIRCULAR SAW BLADES

Designed for Cutting Single Sheet  
Fiber-Cement Board

## C4 Carbide Tip

- For maximum cutting life in single boards

## Hardened and Tempered Blade Body

- For longer life

## 6-Tooth Blade Concept

- For faster cutting action

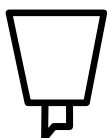
## Unique Shoulder Design

- For consistent chip removal

## Unique Blade Design

- Reduces dust for better working environment

## Tooth Design:



## Square Top Tooth Grind (ST)

- For heavy-duty cutting

## 6-Tooth Concept

- Ideal for single board cutting
- Cuts larger chips for cleaner work environment



Saw Blades



## For Fiber-Cement/Carbide Tip Blade

Diameter	No. of Teeth	Arbor Hole	Grind	Carded Stock #
7-1/4" / 184 mm	6	Universal	ST	15702

- FIBERCUT 6-Tooth carbide tip blades are designed for single board cuts

# FIBERCUT™ DIAMOND CIRCULAR SAW BLADES

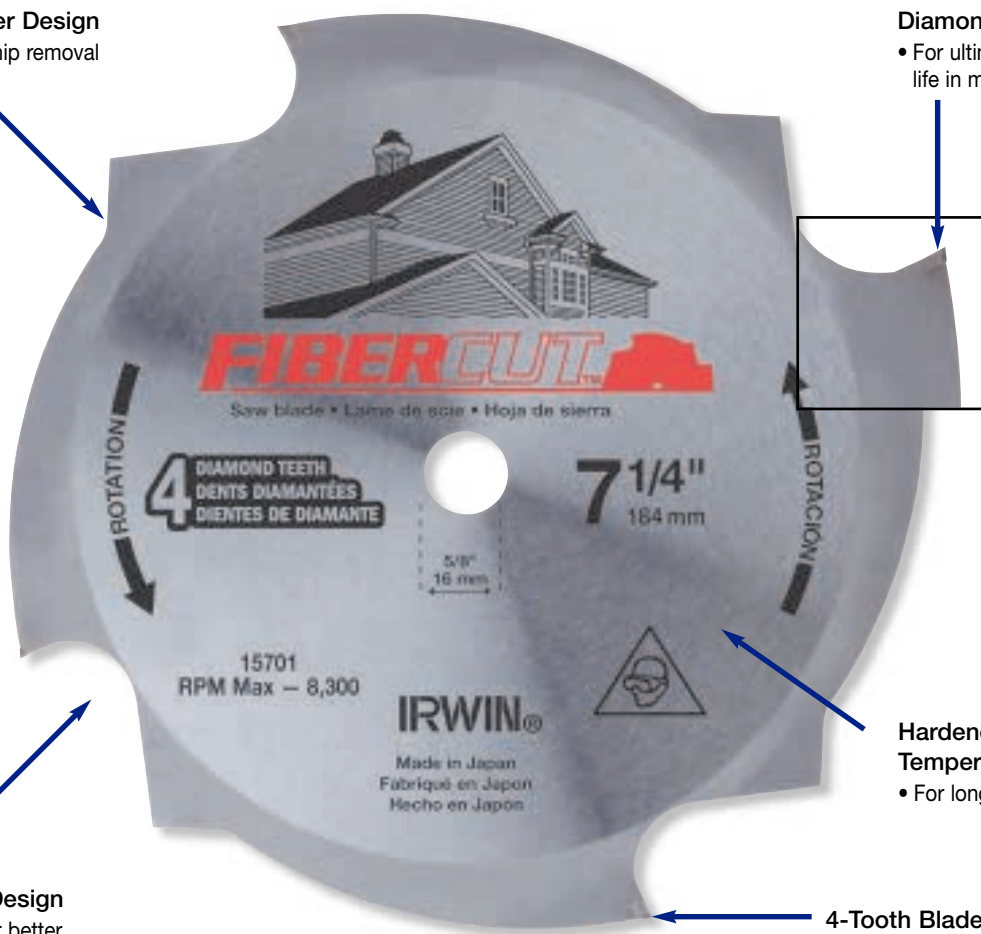
Designed for Cutting Stacked  
Fiber-Cement Boards

## Unique Shoulder Design

- For consistent chip removal

## Diamond Tip Insert

- For ultimate cutting life in multilayer cuts



## Hardened and Tempered Blade Body

- For longer life

## 4-Tooth Blade Concept

- For faster cutting action

## Unique Blade Design

- Reduces dust for better working environment



Saw Blades



- FIBERCUT 4-Tooth diamond circular saw blades are designed for multilayer cuts

## Tooth Design:



## Square Top Tooth Grind (ST)

- For heavy-duty cutting

## 4-Tooth Concept

- Ideal for single and stacked board cutting
- Cuts larger chips for cleaner work environment



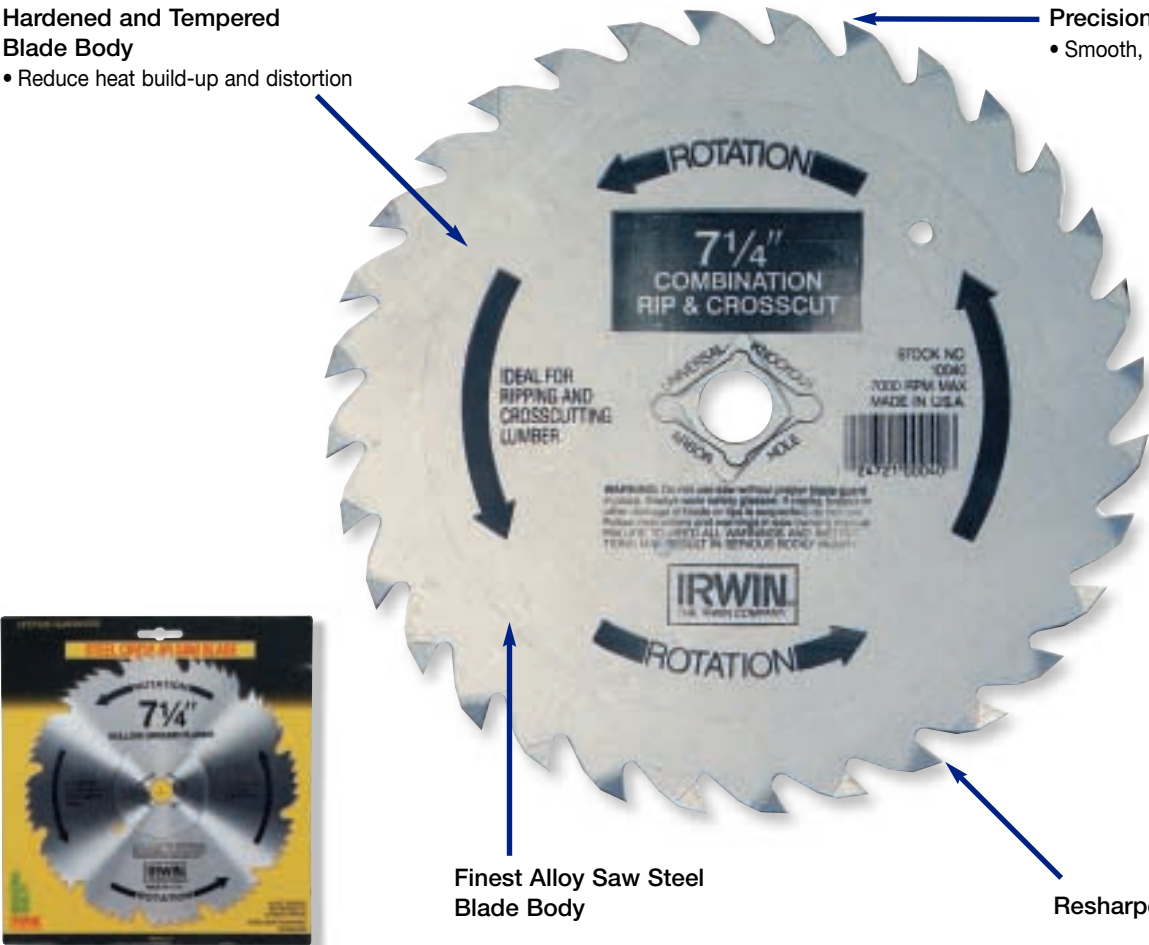
## For Fiber-Cement / Diamond Tip Blade

Diameter	No. of Teeth	Arbor Hole	Grind	Carded Stock #
7-1/4" / 184 mm	4	Universal	ST	15701

# IRWIN® STEEL CIRCULAR SAW BLADES

**Hardened and Tempered Blade Body**  
• Reduce heat build-up and distortion

**Precision Ground Teeth**  
• Smooth, accurate cuts



**Finest Alloy Saw Steel Blade Body**

**Resharpenable Teeth**

## For Wood

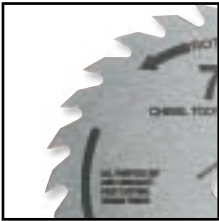
Diameter	No. of Teeth	Arbor Hole	Carded Stock #	Bulk Stock #
7-1/4" / 184 mm	32	Universal	10040	20040



10040

## For Wood - Chisel Tooth Combination

Diameter	No. of Teeth	Arbor Hole	Carded Stock #	Bulk Stock #
5-1/2" / 140 mm	20	5/8" (includes 1/2" bushing)	11010	—
6-1/2" / 165 mm	24	Universal	11020	—
7-1/4" / 184 mm	26	Universal	11040	21040
8" / 203 mm	26	Universal	11050	—
10" / 254 mm	32	5/8"	11070	—



11040

- A very popular all-purpose blade for ripping and crosscut
- Small number of teeth for fast cutting where smooth finish is not needed
- Ideal blade for house framing



# IRWIN® STEEL CIRCULAR SAW BLADES

## For Wood - Standard Combination

Diameter	No. of Teeth	Arbor Hole	Carded Stock #	Bulk Stock #
6-1/2" / 165 mm	40	Universal	11120	—
7-1/4" / 184 mm	40	Universal	11140	22140
8" / 203 mm	40	Universal	11150	—
9" / 229 mm	40	5/8"	11160	—
10" / 254 mm	40	5/8"	11170	—



11140

- Best combination blade for both cutoff and rip
- Blades provide a smoother finish with little loss in speed

## For Wood - Plywood / Paneling

Diameter	No. of Teeth	Arbor Hole	Carded Stock #	Bulk Stock #
5-1/2" / 140 mm	60	5/8" (includes 1/2" bushing)	11810	—
6-1/2" / 165 mm	140	Universal	11820	—
7-1/4" / 184 mm	140	Universal	11840	21840
8" / 203 mm	180	Universal	11850	—
10" / 254 mm	180	5/8"	11870	—



11840

- Smooth, clean cutting in plywood, paneling and veneer
- Large number of teeth

## For Wood - Master Combination

Diameter	No. of Teeth	Arbor Hole	Carded Stock #
6-1/2" / 165 mm	60	Universal	11220
7-1/4" / 184 mm	60	Universal	11240
8" / 203 mm	64	Universal	11250
9" / 229 mm	80	5/8"	11260
10" / 254 mm	85	5/8"	11270



11240

- The best combination for smooth cuts
- All-purpose, general cutting blade for smooth, fast cuts
- Rip, crosscut, and miters

## For Wood - Rip

Diameter	No. of Teeth	Arbor Hole	Carded Stock #
7-1/4" / 184 mm	36	Universal	11540



11540

- Specifically designed for cutting with the grain in hard or soft wood

## For Wood - Crosscut

Diameter	No. of Teeth	Arbor Hole	Carded Stock #
6-1/2" / 165 mm	100	Universal	11720
7-1/4" / 184 mm	100	Universal	11740
8" / 203 mm	100	Universal	11750
10" / 254 mm	100	5/8"	11770



11740

- Special-purpose blade for cutting across the grain in hard or soft wood, when a smooth finish is desired
- Not designed for ripping

# IRWIN® STEEL CIRCULAR SAW BLADES

## For Wood - Hollow Ground Planer

Diameter	No. of Teeth	Arbor Hole	Carded Stock #
6-1/2" / 165 mm	60	Universal	11620
7-1/4" / 184 mm	60	Universal	11640
8" / 203 mm	64	Universal	11650
10" / 254 mm	80	5/8"	11670



11640

- Satin-smooth finish helps eliminate sanding
- All-purpose for rip, crosscut, miters
- Ideal for finish carpentry like cabinet work

## For Wood - Hollow Ground Plywood

Diameter	No. of Teeth	Arbor Hole	Carded Stock #
7-1/4" / 184 mm	150	Universal	11440
8" / 203 mm	180	Universal	11450



11440

- Special-purpose blade for plywood/paneling and laminated woods
- Hollow ground clearance for splinter-free cutting

## Steel Combo Sets For Wood

Diameter	Contents	Carded Stock #
2 Pack	Combo (1) 22140 and (1) 21840	12301
3 Pack	10040	10041
2 Pack	10040	10045

## IRWIN® DADO Sets



16060



16121



16120

- Quickly adjustable, no need to remove dado blade from saw
- Two locking screws to save cut width for future use
- The very large hub provides excellent dynamic balance, substantially reducing undesirable vibration at high speed operation
- Industrial grade tungsten carbide tips last 4-5 times longer than steel dado blades

Diameter	Arbor Hole	Carded Stock #
6" / 152 mm Steel	5/8"	16020
8" / 203 mm Steel	5/8"	16050
6-1/2" / 165 mm Carbide Tipped/Adj.	5/8"	16120
6" / 152 mm Carbide/Adjustable	5/8" Short Arbor	16121
6" / 152 mm Carbide/Stacking	5/8"	16060
8" Carbide/Stacking	5/8"	55826



16050

## Bushings

Diameter	Stock #
3/4" x 5/8" / 19 mm x 16 mm	13907
5/8" x 1/2" / 16 mm x 13 mm	13908
1" x 3/4" / 26 mm x 19 mm	13909

- An expandable grooving set to cut grooves 1/8" to 13/16" wide
- Will fit radial arm and table saws
- Blades are balanced and precision ground

# IRWIN® JIG SAW BLADES

## For Wood - Composition Cutting

Description	Length	Material	Tooth Specifications	Carded Stock #	Bulk Stock #
6 TPI	3-1/8" / 80 mm	HCS	Milled/Alt. Set	10101	10401
10 TPI	3-1/8" / 80 mm	HCS	Milled/Alt. Set	10102	10402
12 TPI	3-1/8" / 80 mm	HCS	Ground/Taper	10103	10403

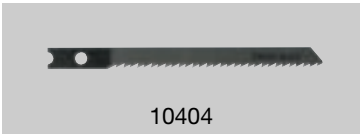


- Hard and soft wood, up to 2" thick, rough cut

## For Wood - Woodscroll Cutting

Description	Length	Material	Tooth Specifications	Carded Stock #	Bulk Stock #
20 TPI	2-3/4" / 70 mm	HCS	*	10104	10404

\*Fleam Ground Tooth/Taper Ground Body



- Super fine finish for scroll cutting wood, plywood, plastics, etc. 1/4" to 1" smooth cut

## For Wood - Flush Cutting

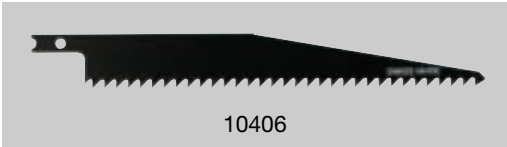
Description	Length	Material	Tooth Specifications	Carded Stock #	Bulk Stock #
8 TPI	3-5/8" / 92 mm	HCS	Milled/Alt. Set	10105	10405



- Flush cutting woods, corners and other tight areas, medium cut

## For Wood - Thick Woods

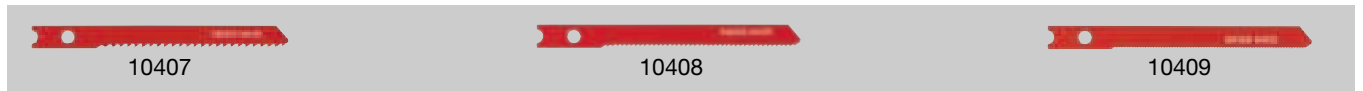
Description	Length	Material	Tooth Specifications	Carded Stock #	Bulk Stock #
6 TPI	6" / 152 mm	HCS	Milled/Alt. Set	10106	10406



- Permits cuts in wood over 2" thick, rough cut

# IRWIN® JIG SAW BLADES

## For Metal - Fiberglass and Plastics



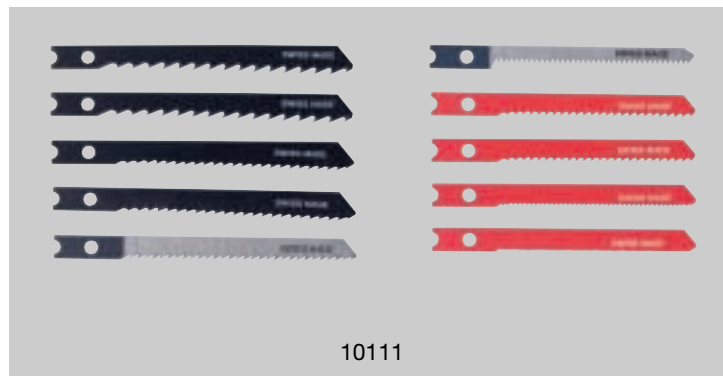
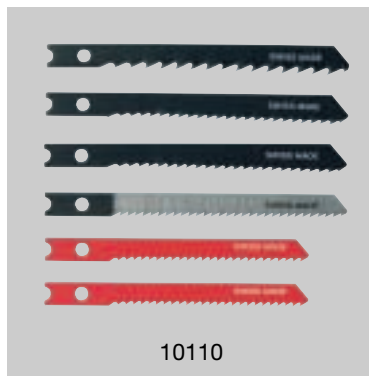
- Steel 1/16" to 1/8" aluminum and copper 3/32" to 3/16", plastics, 1/2" thick, medium cut

- Steel 1/16" to 3/16" aluminum and copper under 1/16", pipe under 3/64" wall thick, fine cut

- Steel 1/64" to 3/32" aluminum and copper under 3/32", pipes with thin walls. Plastic up to 1/2" thick, fine cut

Description	Length	Material	Tooth Specifications	Carded Stock #	Bulk Stock #
13 TPI	2-3/4" / 70 mm	HSS	Milled /Alt. Set	10107	10407
21 TPI	2-3/4" / 70 mm	HSS	Milled/Wave Set	10108	10408
36 TPI	2-3/4" / 70 mm	HSS	Milled/Wave Set	10109	10409

## Sets



Description	Contents	Carded Stock #
6 pc Set	1 - 10101 (For Wood); 2 - 10102 (For Wood) 1 - 10103 (For Wood); 2 - 10107 (For Metal)	10110
10 pc Set	2 - 10101 (For Wood); 2 - 10102 (For Wood) 1 - 10103 (For Wood); 1 - 10104 (For Wood) 2 - 10107 (For Metal); 1 - 10108 (For Metal) 1 - 10109 (For Metal)	10111



# IRWIN® RECIPROCATING SAW BLADES

## For Wood - All Purpose and Composition Cutting



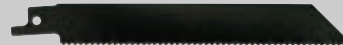
10201

- Rough-in work, in wood without nails



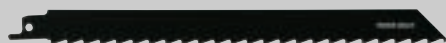
10503

- Fine cuts for opening crates with nails, removing wood shingles and siding



10552

- Composition materials, all wood and nail-embedded woods



10504

- Efficient cuts in thick woods, plywood, plastics, fastest cutting, rough sawing



10505

- Nail-embedded woods, 12" / 305 mm length flush cutting

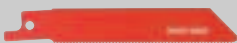
Description	Length	Material	Tooth Specifications	Carded Stock #	Bulk Stock #
6 TPI	6" / 152 mm	HCS*	Milled/Alt. Set	10201	—
10 TPI	6" / 152 mm	HCS	Milled/Raker	10202	10552
18 TPI	6" / 152 mm	HCS	Milled/Raker	10203	10503
3 TPI	9" / 229 mm	HCS	Milled/Alt. Set	10204	10504
6 TPI	12" / 305 mm	HCS	Milled/Alt. Set	10205	10505

## For Metal



10506

- For metals lighter than 3/64" / 1 mm thick; conduit, pipe, tubing, channels, etc.



10507

- For metals heavier than 3/64" / 1 mm thick; conduit, pipe, tubing, channels, etc.



10508

- For metals heavier than 3/64" / 1 mm thick; conduit, pipe, tubing, channels, etc.



10509

- Cutting metals heavier than 1/8" / 3 mm thick; bar stock, hard rubber, etc.



10510

- For plaster, plaster with metal lath, plaster board. Cuts on both forward and backward strokes

Description	Length	Material	Tooth Specifications	Carded Stock #	Bulk Stock #
24 TPI	4" / 102 mm	HSS **	Milled/Wave Set	10206	10506
18 TPI	4" / 102 mm	HSS	Milled/Raker	10207	10507
18 TPI	6" / 152 mm	HSS	Milled/Raker	10208	10508
14 TPI	6" / 152 mm	HSS	Milled/Raker	10209	10509
6 TPI	6" / 152 mm	Bi-M ***	Milled/Alt. Set	10210	10510
6 TPI	6" / 152 mm	HCS		—	10551

## Set

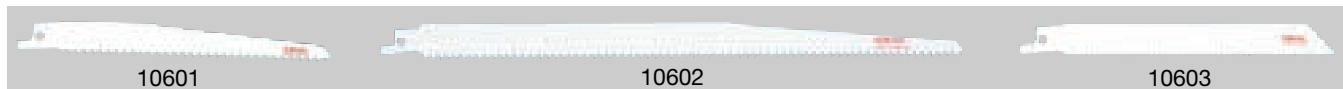
Description	Contents	Carded Stock #
4 pc Set	One each: 10201, 10203, 10208, 10209	10211



10211

# IRWIN® BI-METAL RECIPROCATATING SAW BLADES

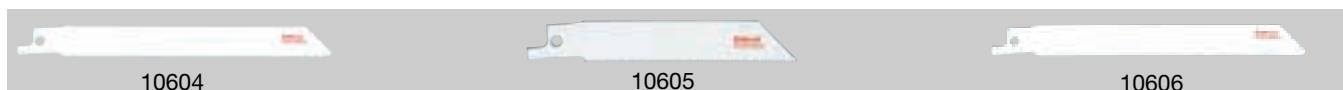
## For Wood - Composition Cutting



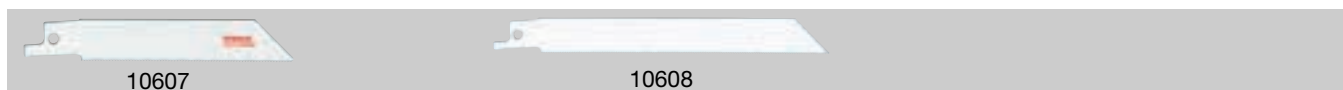
- Fast cutting in all woods or nail-embedded woods. General roughing work
- Extra long for fast cutting in all woods or nail-embedded woods. Rough cut
- All woods and composition materials. Nail-embedded wood, plus cast aluminum, high gauge non-ferrous metals. Fast cutting

Description	Length	Bi-Metal Type	Tooth Specifications	Carded Stock #	Bulk Stock #
6 TPI	6" / 152 mm	MX2	Milled/Alt. Set	10301	10601
6 TPI	12" / 305 mm	MX2	Milled/Alt. Set	10302	10602
10 TPI	6" / 152 mm	MX2	Milled/Raker	10303	10603

## For Metal - General Cutting



- Heavy-gauge metals, angles, bar stock 1/8" / 3 mm and thicker, hard rubber, fast cutting
- Fast cutting of heavy-gauge metals, angles, bar stock 1/8" / 3 mm and thicker
- Extra length and finer teeth give faster cutting of heavy gauge metals, bar stock 1/8" / 3 mm and thicker

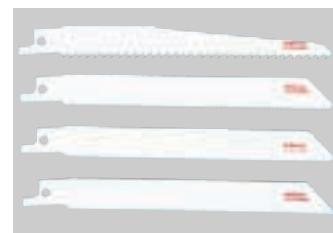


- Super fast cutting of heavy-gauge metals, angles, bar stock 1/8" / 3 mm and thicker
- Extra length, super fast for cutting heavy-gauge metals, angles, bar stock 1/8" / 3 mm and thicker

Description	Length	Bi-Metal Type	Tooth Specifications	Carded Stock #	Bulk Stock #
14 TPI	6" / 152 mm	MX2	Milled/Raker	10304	10604
18 TPI	4" / 102 mm	MX2	Milled/Raker	10305	10605
18 TPI	6" / 152 mm	MX2	Milled/Raker	10306	10606
24 TPI	4" / 102 mm	MX2	Milled/Wave	10307	10607
24 TPI	6" / 152 mm	MX2	Milled/Wave	10308	10608

## Set

Description	Contents	Carded Stock #
4 pc Set	One Each: 10301, 10304, 10306, 10308	10309



10309

# IRWIN® BI-METAL HOLE SAW BLADES

## Hole Saw Blades

- Cuts clean, accurate size holes for door locks, dead bolts, plumbing, wiring, auto speaker wiring, dryer vents. Use where any large bit is needed
- Variable-Pitch, High Speed Steel Teeth welded to alloy steel body. Teeth stay sharp through even the toughest jobs
- Rugged one-piece construction eliminates the need for a separate arbor
- 1/4" Pilot Drill fits all sizes
- Use in wood, stainless steel, cast iron, copper, aluminum, brass, plastics

Saw Blades

53716



53732



53748



53764



53796



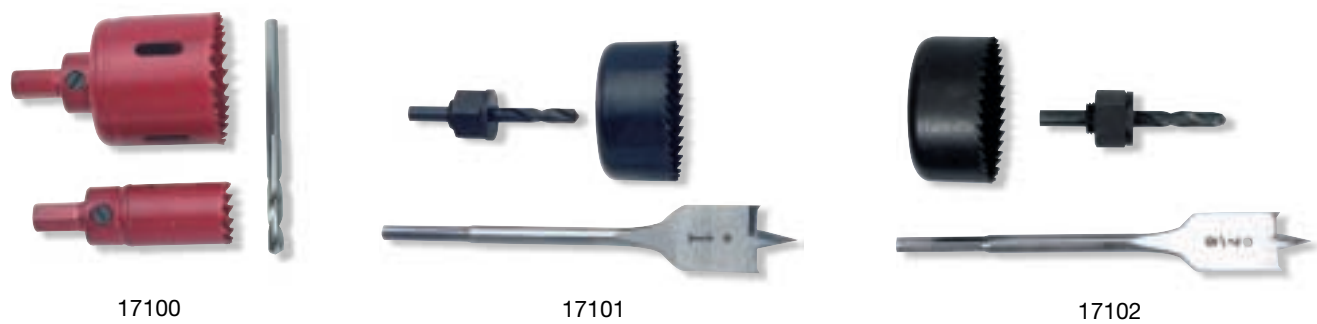
Diameter	Carded Stock #	Bulk Stock #
9/16" / 14 mm	–	53709
5/8" / 16 mm	17010	53710
11/16" / 17 mm	17011	53711
3/4" / 19 mm	17012	53712
13/16" / 21 mm	17013	53713
7/8" / 22 mm	17014	53714
15/16" / 24 mm	17015	53715
1" / 26 mm	17016	53716
1-1/16" / 27 mm	17017	53717
1-1/8" / 29 mm	17018	53718
1-3/16" / 30 mm	17019	53719
1-1/4" / 32 mm	17020	53720
1-5/16" / 33 mm	17021	53721
1-3/8" / 35 mm	17022	53722
1-7/16" / 37 mm	17023	53723
1-1/2" / 38 mm	17024	53724
1-9/16" / 40 mm	17025	53725
1-5/8" / 41 mm	17026	53726
1-11/16" / 43 mm	17027	53727
1-3/4" / 44 mm	17028	53728
1-7/8" / 48 mm	17030	53730
2" / 51 mm	17032	53732
2-1/16" / 52 mm	17033	53733
2-1/8" / 54 mm	17034	53734
2-1/4" / 57 mm	17036	53736
2-5/16" / 59 mm	17037	53737
2-3/8" / 60 mm	17038	53738
2-1/2" / 64 mm	17040	53740
2-9/16" / 65 mm	17041	53741
2-5/8" / 67 mm	17042	53742
2-3/4" / 70 mm	17044	53744
2-7/8" / 73 mm	17046	53746
3" / 76 mm	17048	53748
3-1/8" / 54 mm	17050	53750
3-1/4" / 83 mm	17052	53752
3-3/8" / 86 mm	17054	53754
3-1/2" / 89 mm	17056	53756
3-5/8" / 92 mm	17058	53758
3-3/4" / 95 mm	17060	53760
3-7/8" / 99 mm	17062	53762
4" / 102 mm	17064	53764
4-1/8" / 105 mm	–	53766
4-1/4" / 108 mm	–	53768
4-3/8" / 111 mm	–	53770
4-1/2" / 114 mm	–	53772
4-3/4" / 121 mm	–	53776
5" / 127 mm	–	53780
5-1/2" / 140 mm	–	53788
5-3/4" / 146 mm	–	53792
6" / 152 mm	–	53796

# IRWIN® BI-METAL HOLE SAW BLADES

## Hole Saw Accessories

Description	Carded Stock #	Bulk Stock #
Pilot Drill - HSS - 1/4" / 6 mm	17000	-
12" / 305 mm Hole Saw Arbor Extension	-	54212

### Bi-Metal Hole Saw Blades Kit Door Lock Installation



Description	Contents	Carded Stock #
3 pc Set	Metal or Wood Doors	17100
3 pc Set	Wood Doors 1" / 26 mm	17101
3 pc Set	Wood Doors 7/8" / 22 mm	17102

Saw Blades



# HANSON® ABRASIVE WHEELS

## Abrasive Wheels - Masonry Cutting

- Masonry cutting blades have silicone carbide abrasive for fast and easy cutting of limestone, brick, stone and concrete



12842

Diameter	Carded Stock #	Bulk Stock #
6-1/2" / 165 mm	12635	12835
7" / 177 mm	12642	12842
8" / 203 mm	12662	12862

## Abrasive Wheels - Metal Cutting

- Metal cutting blades, made from aluminum oxide grit bonded in fiberglass
- Ideal for iron, steel, bronze, brass, aluminum and copper



12942

Diameter	Carded Stock #	Bulk Stock #
6-1/2" / 165 mm	12735	12935
7" / 177 mm	12742	12942
8" / 203 mm	12762	12962

## Masonry Depressed and Raised Center Cutting Wheels

- Depressed center wheels provide long life and fast removal in all types of grinding applications.
- Depressed center design allows them to be used with most large angle grinders
- Raised hub quick change mounting wheels are available in 7" and 9" sizes and fit all brands with 5/8" - 11" spindle threads



12503

Diameter	Bulk Stock #
4-1/2" / 114 mm x 1/4" / 6 mm x 7/8" / 22 mm Depressed Center	12501
7" / 177 mm x 1/4" / 6 mm x 5/8" / 16 mm - 11 Raised Hub	12503
9" / 229 mm x 1/4" / 6 mm x 5/8" / 16 mm - 11 Raised Hub	12504

## Metal Depressed and Raised Center Cutting Wheels

- Depressed center wheels provide long life and fast removal in all types of grinding applications
- Depressed center design allows them to be used with most large angle grinders
- Raised hub quick change mounting wheels are available in 7" and 9" sizes and fit all brands with 5/8" - 11" spindle threads



12505

Diameter	Bulk Stock #
4-1/2" / 114 mm x 1/4" / 6 mm x 7/8" / 22 mm Depressed Center	12502
7" / 177 mm x 1/4" / 6 mm x 5/8" / 16 mm - 11 Raised Hub	12505
9" / 229 mm x 1/4" / 6 mm x 5/8" / 16 mm - 11 Raised Hub	12506

# ***Quick Change Tools***



**Chuck and Extensions**  
**Spade Bits**  
**Power Screwdriver Bits**  
**Nutsetters**  
**Socket Adapters**  
**Drill Bits**  
**Masonry Bits**  
**Countersinks**  
**Plug Cutters**

# LOCK-N-LOAD™ CHUCK AND EXTENSIONS

## HOW TO USE:



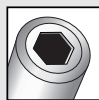
Select 1/4" grooved hex shank bit



Slide back sleeve



Load bit, release sleeve



Internal hex drive eliminates slippage



90102



90106



90112



- Slim diameter chuck and extensions pass through 5/8" holes

### Description

### Carded Stock #

2" Quick Change Chuck	90102
6" Quick Change Extension	90106
12" Quick Change Extension	90112

# LOCK-N-LOAD™ ACCESSORIES

## 4" SPEEDBOR® SL Bits and 6" SPEEDBOR® Bits



90312



90212

### 4" SPEEDBOR SL Bits

- For tight areas (between studs, inside cabinets) where standard length spade bits won't fit
- Drills a straight hole in tight areas
- Drills through double studs

### 6" SPEEDBOR Bits

- General purpose length

Diameter	4" Carded Stock #	6" Carded Stock #
1/4"	—	90304
5/16"	—	90305
3/8"	—	90306
7/16"	—	90307
1/2"	90208	90308
9/16"	—	90309
5/8"	90210	90310
11/16"	—	90311
3/4"	90212	90312
13/16"	—	90313
7/8"	90214	90314
15/16"	—	90315
1"	90216	90316
1-1/8"	—	90318
1-1/4"	90220	90320
1-3/8"	—	90322
1-1/2"	90224	90324

## 4" and 6" SPEEDBOR® Sets



90243



90343



90344



90346

Description	Bit Lengths	Contents	Stock #
3 pc Set	4"	1/2", 3/4", 1" - Carded	90243
3 pc Set	6"	1/2", 3/4", 1" - Carded	90343
4 pc Set	6"	1/2", 3/4", 1", 6" Extension - Pouched	90344
6 pc Set	6"	3/8", 1/2", 5/8", 3/4", 7/8", 1" - Pouched	90346



**SAFETY INSTRUCTIONS:** Failure to follow warnings may result in bodily injury.  
**WARNING:** ALWAYS wear safety goggles to protect your eyes and wear other appropriate safety items for protection.



# LOCK-N-LOAD™ ACCESSORIES

## LOCK-N-LOAD™ Combination Sets



90590

Description	Set Contents	Carded Stock #
13 pc Set	QC Chuck, Drill Bits 1/16", 1/8", 3/16" P1, P2, P3, S6-8, S8-10, S10-12 Spade Bits 1/2", 3/4", 1"	90590
19 pc Set	QC Chuck, Drill Bits 1/16", 1/8", 3/16", 1/4" P1, P2, P3, S6-8, S8-10, S10-12 Nutsetter 1/4", 5/16" Spade Bits 3/8", 1/2", 5/8", 3/4", 7/8", 1" Storage Case	90591



90591



90510

Diameter	Carded Stock #
1/16"	90504
3/32"	90506
1/8"	90508
5/32"	90510
3/16"	90512
7/32"	90514
1/4"	90516

## HANSON® HSS Drill Bits

- Excels in metal, wood, and plastic applications
- High speed steel drill bit lasts longer
- 118° point geometry



90501

Style #	Number Of Holes	Hole Sizes	Increments	Max. Material Thickness	Carded Stock #
1	13	1/8" - 1/2"	1/32"	1/8"	90501

## UNIBIT® Step Drill



- Drill 13 hole sizes with one bit
- Self starting tip
- Drills and enlarges holes up to 1/2"



90558

Diameter	Carded Stock #
1/8"	90558
5/32"	90560
3/16"	90562
1/4"	90566

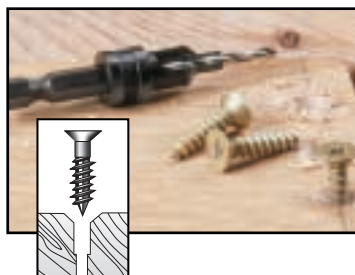
## JORAN® Masonry Drill Bits

- Ideal for use with cinder block, brick, wall tile and other masonry applications
- The UNI-PLUS® bit's geometry allows the bit to also be used in sheet metal and wood



# LOCK-N-LOAD™ ACCESSORIES

## HANSON® Adjustable Countersinks



90583

Description	Counterbore Diameter	Carded Stock #
#4 - 5 Countersink	3/8"	90581
#6 - 7 Countersink	3/8"	90582
#8 - 9 Countersink	3/8"	90583
#10 Countersink	3/8"	90584
#12 Countersink	1/2"	90585

## IRWIN® Plug Cutters

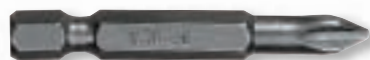


90578

Diameter	Carded Stock #
1/4"	90576
3/8"	90577
1/2"	90578
5/8"	90579

- For covering fastener holes in furniture, cabinetry, floors, decks, and other woodworking projects
- Made of hardened, high-carbon steel
- Makes dowels

## HANSON® Power Screwdriver Bits



90532



90538

Description	Overall Length	Carded Stock #
#1 Phillips Bit	1-15/16"	90531
#2 Phillips Bit	1-15/16"	90532
#3 Phillips Bit	1-15/16"	90533
6-8 Slotted Bit	1-15/16"	90537
8-10 Slotted Bit	1-15/16"	90538
10-12 Slotted Bit	1-15/16"	90539

## HANSON® Nutsetters



90549

Description	Overall Length	Carded Stock #
1/4" Magnetic Nutsetter	1-7/8"	90547
5/16" Magnetic Nutsetter	1-7/8"	90548
3/8" Magnetic Nutsetter	1-7/8"	90549

## HANSON® Socket Adapters



90545

Description	Overall Length	Carded Stock #
1/4" Socket Adapter	2"	90544
3/8" Socket Adapter	2"	90545



# **Wood Boring Tools**

**Spade Bits**

**Power Drill Auger Bits**

**Boring Machine  
Auger Bits**

**Hand Brace Auger Bits**

**Impact Wrench  
Auger Bits**

**Adjustable Wood Bits**

**Self-Feed Wood Bits**

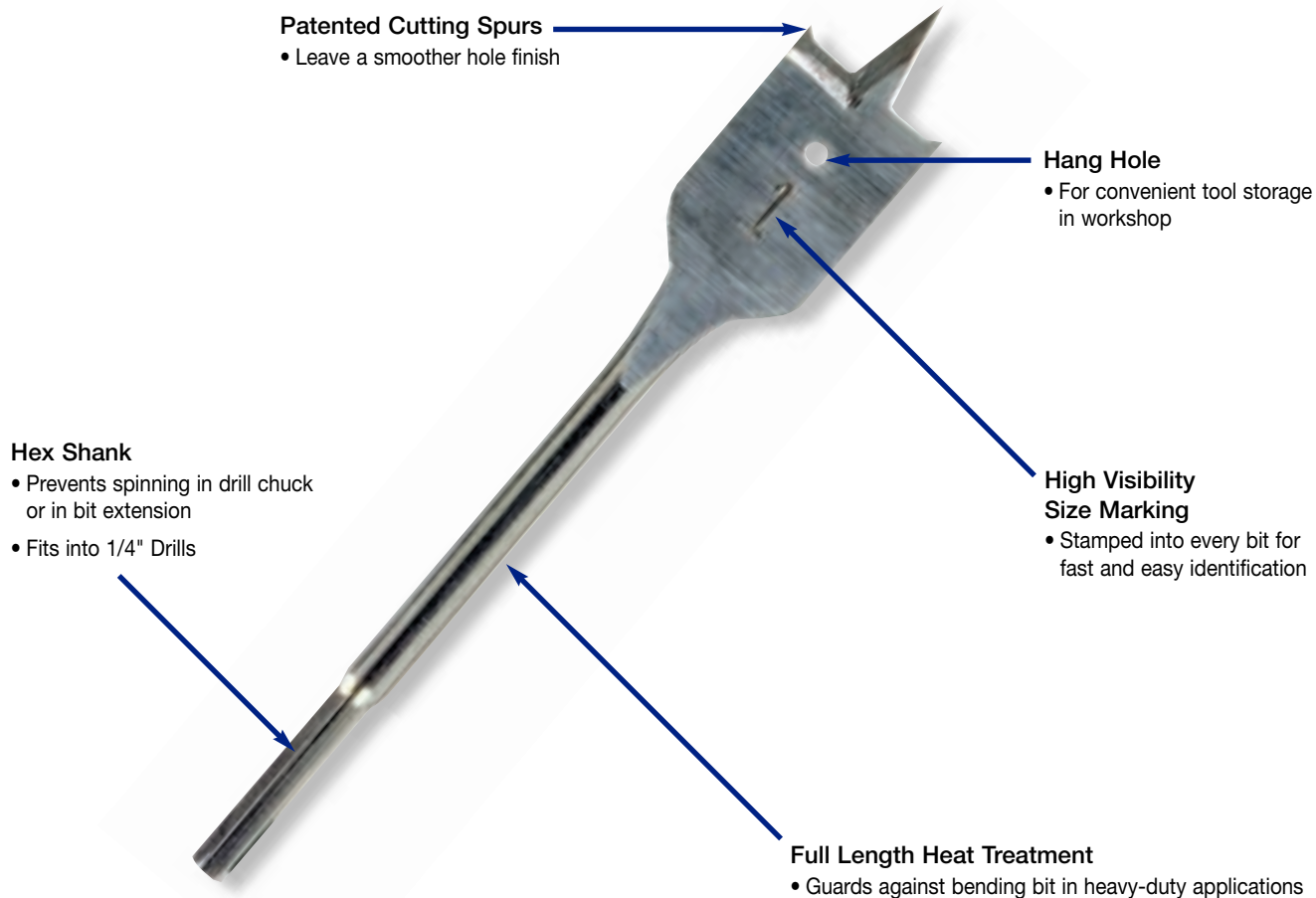
**Forstner Bits**

**Brad Point Drill Bits**

**Hand Brace Installer Bits**

**Power Drill Installer Bits**

# SPEEDBOR® Wood Boring Bits



## 4-3/4" SPEEDBOR2000® SL Bits



- Drills through double studs
- Allows for access in tight areas (between studs, inside cabinets) where standard length spade bits won't fit
- Drills a straight hole in tight areas

Diameter	Carded Stock #
1/2"	87908
5/8"	87910
3/4"	87912
7/8"	87914
1"	87916
1-1/4"	87920
1-1/2"	87924

For additional SPEEDBOR® SL Bits see LOCK-N-LOAD™, Page 10-1



# SPEEDBOR® Wood Boring Bits



88816

## 6" SPEEDBOR2000® Bits

- General purpose length

Diameter	Carded Stock #	Bulk Stock #
1/4"	88804	99904
5/16"	88805	99905
3/8"	88806	99906
7/16"	88807	99907
1/2"	88808	99908
9/16"	88809	99909
5/8"	88810	99910
11/16"	88811	99911
3/4"	88812	99912
13/16"	88813	99913
7/8"	88814	99914
15/16"	88815	99915
1"	88816	99916
1-1/8"	88818	99918
1-1/4"	88820	99920
1-3/8"	88822	99922
1-1/2"	88824	99924

For additional SPEEDBOR® Bits see LOCK-N-LOAD™, Page 10-1

## 16" SPEEDBOR2000® XL Bits



88716

- Extra length provides added reach

Diameter	Carded Stock #	Bulk Stock #
3/8"	88706	99706
1/2"	88708	99708
5/8"	88710	99710
3/4"	88712	99712
7/8"	88714	99714
1"	88716	99716

Wood Boring Tools



88702



88601

## SPEEDBOR® Wood Bit Extensions

- Adds extra reach to wood boring bit
- Extension head will follow 5/8" and larger bits through hole
- Two set screws secure bit into extension
- 1/8" hex key included with extension

Overall Length	Carded Stock #	Bulk Stock #
6"	88702	99702
12"	88601	99601



# SPEEDBOR® Wood Boring Bits

## 4-3/4" SPEEDBOR2000® SL Bit Set



87950

Description	Contents	Carded Stock #
3 pc Set	1/2", 3/4", 1"	87950

## 6" SPEEDBOR2000® Bit Sets



88889



88898



88899



88894

Description	Contents	Pouched Stock #
3 pc Set	1/2", 3/4", 1"	88889
6 pc Set	3/8", 1/2", 5/8", 3/4", 1", 6" Ext.	88898
6 pc Set	3/8", 1/2", 5/8", 3/4", 7/8", 1"	88899
13 pc Set	1/4" to 1" by 1/16ths	88894

## 6" SPEEDBOR2000® SlimCase™ Bit Set



88890

Description	Contents	Tubed Stock #
6 pc Set	3/8", 1/2", 5/8", 3/4", 7/8", 1"	88890

## 6" SPEEDBOR2000® Workshop Rack Sets



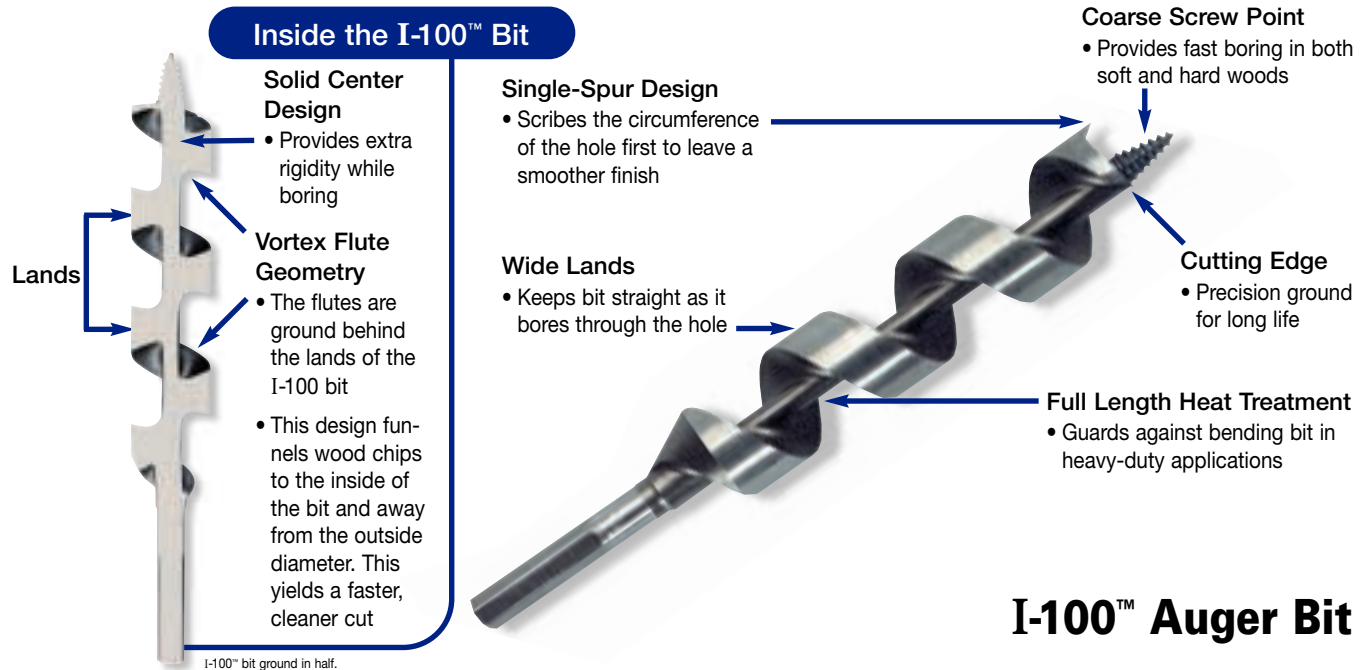
88888



88887

Description	Contents	Carded Stock #
6 pc Set	3/8", 1/2", 5/8", 3/4", 7/8", 1"	88888
13 pc Set	1/4" to 1" by 1/16ths	88887

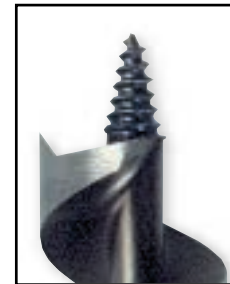
# IRWIN® POWER DRILL AUGER BITS



## I-100™ Auger Bit

## I-100™ Auger Bits 7-1/2" OL\* 4-1/2" Twist

Diameter	Hex Shank Size	Pouched Stock #
1/4"	7/32"	49904
5/16"	7/32"	49905
3/8"	7/32"	49906
7/16"	7/32"	49907
1/2"	7/32"	49908
9/16"	5/16"	49909
5/8"	5/16"	49910
11/16"	5/16"	49911
3/4"	5/16"	49912
13/16"	5/16"	49913
7/8"	5/16"	49914
15/16"	5/16"	49915
1"	5/16"	49916
1-1/8"	7/16"	49918
1-1/4"	7/16"	49920
1-3/8"	7/16"	49922
1-1/2"	7/16"	49924



Wood Boring Tools



49999



49998

## I-100™ Auger Bit Sets

Description	Contents	Pouched Stock #
3 pc Set	1/4", 3/8", 1/2"	49999
6 pc Set	1/4", 3/8", 1/2", 5/8", 3/4", 1"	49998

\*OL = Overall Length

# IRWIN® POWER DRILL AUGER BITS

## Spur-Free Cutting Edge

- Can be used where small nails are encountered

## Hollow Center Flutes

- Clears chips quickly out of hole
- Recommended where chip clogging is a problem such as green wood and creosoted poles

## Ship Auger Bit Tip

## Full Length Heat Treatment

- Guards against bending bit in heavy-duty applications
- Strengthens twist where greatest strain occurs

## Ship Auger Bit

## Medium-Fast Screw Point

- For fast boring

## Wide Lands

- Helps keep bit straight as it bores through a hole

## Short Ship Auger Bits

7-1/2" OL\*

5" Twist

- Short length allows bit to be used in tight areas

42416

Diameter	Hex Shank Size	Tubed Stock #
5/8"	5/16"	42410
11/16"	5/16"	42411
3/4"	5/16"	42412
13/16"	5/16"	42413
7/8"	5/16"	42414
1"	5/16"	42416
1-1/8"	7/16"	42418
1-1/4"	7/16"	42420

## Long Ship Auger Bits

520H Series

17" OL\*

12" Twist

- Sizes 3/8" to 1/2" have 5" shanks with 1-3/4" of 23/64" round and 1-3/4" of 5/16" hex
- Sizes 9/16" to 2" have 5" shanks with 1-3/4" of 7/16" hex – cut off hex shank if your job requires a round shank

47316

Diameter	Hex Shank Size	Tubed Stock #	Bulk Stock #
3/8"	5/16"	47406	47306
7/16"	5/16"	47407	47307
1/2"	5/16"	47408	47308
9/16"	7/16"	47409	47309
5/8"	7/16"	47410	47310
11/16"	7/16"	47411	47311
3/4"	7/16"	47412	47312
13/16"	7/16"	47413	47313
7/8"	7/16"	47414	47314
15/16"	7/16"	47415	47315
1"	7/16"	47416	47316
1-1/16"	7/16"	47417	47317
1-1/8"	7/16"	47418	47318
1-3/16"	7/16"	–	47319
1-1/4"	7/16"	47420	47320
1-5/16"	7/16"	–	47321
1-3/8"	7/16"	47422	47322
1-1/2"	7/16"	47424	47324
1-5/8"	7/16"	–	47326
1-3/4"	7/16"	–	47328
2"	7/16"	–	47332

\*OL = Overall Length

# IRWIN® POWER DRILL AUGER BITS

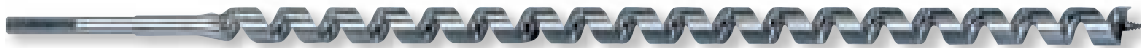
## Power Pole Auger Bits



46813



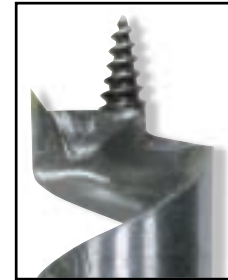
46915



47016

- Hollow center twist design for fast, continuous flow of chips
- Single-spur design bores smooth, clean holes for installing bolts and pins
- For boring creosoted poles and construction timbers and multiple timber applications
- 5" shank has 1-3/4" of 1/2" round and 1-3/4" of 7/16" hex – cut off hex section and use 1/2" round shank if job requires
- Full length heat treatment strengthens twist where greatest strain occurs
- Medium-fast screw pitch

Diameter	Hex Shank Size	412H	418H	424H
		17" OL* 12" Twist Bulk Stock #	23" OL* 18" Twist Bulk Stock #	29" OL* 24" Twist Bulk Stock #
9/16"	7/16"	46809	46909	47009
5/8"	7/16"	46810	46910	47010
11/16"	7/16"	46811	46911	47011
3/4"	7/16"	46812	46912	47012
13/16"	7/16"	46813	46913	47013
7/8"	7/16"	–	46914	47014
15/16"	7/16"	–	46915	47015
1"	7/16"	–	–	47016
1-1/16"	7/16"	–	–	47017



Wood Boring Tools



43805



43907

## 18" Auger Bit Extensions

- Hex key included
- Six flats on shank
- Heavy-duty double set screw type

Compatible Auger Shanks	Minimum Hole Dia. Ext. Will Follow Through	Bulk Stock #
5/16" Hex or ( 23/64" round )	11/16"	43805
7/16" Hex or ( 1/2" round )	1-1/16"	43907

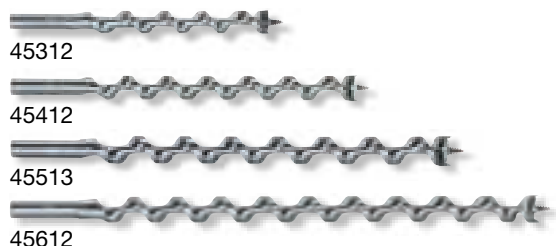
\*OL = Overall Length



# IRWIN® BORING MACHINE AUGER BITS

## Machine Auger Bits - 62R Series 1/2" Round Shank

- Round shanks for power drills and boring machines
- Heat-treated full length for extra strength
- Heavy stem increases strength and rigidity, reduces vibration
- 1/2" x 2" round shank



Diameter	8" OL* 6" Twist Bulk Stock #	10" OL* 8" Twist Bulk Stock #	12" OL* 10" Twist Bulk Stock #	14" OL* 12" Twist Bulk Stock #
1/4"	45304	—	—	—
5/16"	45305	—	—	—
3/8"	45306	45406	—	45606
7/16"	45307	45407	—	—
1/2"	45308	—	—	45608
9/16"	45309	45409	—	—
5/8"	45310	—	—	45610
11/16"	45311	45411	—	45611
3/4"	45312	45412	—	45612
13/16"	45313	—	45513	45613
7/8"	45314	—	—	45614
1"	45316	—	45516	45616

## Railroad Tie Machine Auger Bits - 72R Series

- Solid center type with double cutters and double side lips
- Stem is heavier at shank section to give added strength where greatest strain occurs
- Especially heavy stem gives extra overall strength and rigidity to reduce vibration
- For power drills, drill presses, and boring machines
- 3/32" groove in shank for use in boring machines



Diameter (with screw point)	Round Shank	12-9/16" OL* 10-1/4" Twist Bulk Stock #	13-15/16" OL* 10-1/4" Twist Bulk Stock #
3/8"	13/32"	49506	—
7/16"	15/32"	49507	49707
1/2"	15/32"	49508	49708
9/16"	15/32"	—	49709

Diameter (no screw point)	Round Shank	12-3/16" OL* 10-1/4" Twist Bulk Stock #	13-9/16" OL* 10-1/4" Twist Bulk Stock #
1/2"	15/32"	49608	49808

# IRWIN® HAND BRACE AUGER BITS

## Utility Pole Auger Bits



46513



46616



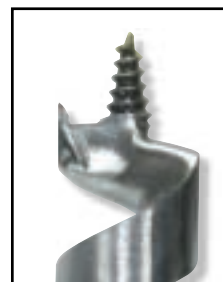
46716

- Single-twist type with single-spur, cutter side lip

- Specially designed to bore through creosoted poles without clogging, binding or stopping to clear chips

- Equally efficient for boring large timbers used in heavy construction
- Medium-fast screw pitch
- Hollow center twist design for fast, continuous flow of chips
- Heat-treated full length for extra strength
- Adapter Shank Sizes  
(11/16" to 1-1/16") 5/16" Hex Shank

Diameter	413T	415T	416T
	12" OL* 8" Twist Bulk Stock #	18" OL* 12" Twist Bulk Stock #	24" OL* 18" Twist Bulk Stock #
3/8"	—	46606	—
7/16"	—	46607	—
1/2"	—	46608	—
9/16"	46509	46609	—
5/8"	—	46610	—
11/16"	46511	46611	46711
3/4"	—	46612	—
13/16"	46513	46613	46713
7/8"	—	46614	—
15/16"	—	46615	—
1"	—	46616	46716
1-1/16"	—	46617	—



## Long Ship Auger Bits - 515T Series - 18" OL 12" Twist

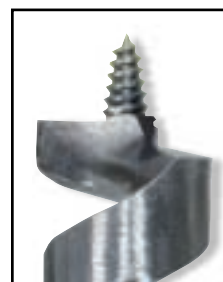


47116

- For use in drilling applications where small nails and other foreign materials may be encountered

- For deep boring work in large timbers, telephone and power poles, on docks and bridges, in mining and heavy construction
- Single-twist type with single cutter and side lip
- Heat-treated for extra strength
- Medium-fast screw pitch
- Adapter Shank Sizes  
(1/4" to 5/8") Hex Not Available  
(11/16" to 1-1/16") 5/16" Hex Shank  
(1-1/8" to 1-1/2") 7/16" Hex Shank

Diameter	Bulk Stock #
1/4"	47104
5/16"	47105
3/8"	47106
7/16"	47107
1/2"	47108
9/16"	47109
5/8"	47110
11/16"	47111
3/4"	47112
13/16"	47113
7/8"	47114
15/16"	47115
1"	47116
1-1/16"	47117
1-1/8"	47118
1-1/4"	47120
1-1/2"	47124



\*OL = Overall Length

# IRWIN® HAND BRACE AUGER BITS

## Solid-Center Auger Bits - 62T Series

- Balanced cutting head with medium-fast screw pitch bores cleaner, faster
- Heat-treated full length for extra strength
- Double-spur, double-cutter design leaves very clean hole finish



Diameter	Twist Length	Overall Length	Pouched Stock #	Bulk Stock #
1/4"	3-1/2"	7-1/2"	43604	–
5/16"	3-5/8"	7-5/8"	43605	–
3/8"	3-3/4"	7-3/4"	43606	–
7/16"	3-7/8"	7-7/8"	43607	–
1/2"	4"	8"	43608	–
9/16"	4-1/8"	8-1/8"	43609	–
5/8"	4-1/4"	8-1/4"	43610	–
11/16"	4-3/8"	8-3/8"	43611	–
3/4"	4-1/2"	8-1/2"	43612	–
13/16"	4-5/8"	8-5/8"	43613	–
7/8"	4-9/16"	8-3/4"	43614	–
15/16"	4-11/16"	8-7/8"	43615	–
1"	4-13/16"	9"	43616	–
1-1/8"	4-7/8"	9-1/8"	–	43618
1-1/4"	4-7/8"	9-1/4"	–	43620
1-1/2"	4-7/8"	9-1/2"	–	43624

## Solid-Center Auger Bit Sets - 62T Series

- Sets contain one of each size listed



43695



43697



43699

Description	Contents	Wooden Box Stock #	Pouched Stock #
6 pc Set	1/4", 3/8", 1/2", 5/8", 3/4, 1"	–	43695
13 pc Set	1/4" to 1" by 1/16ths	–	43697
13 pc Set	Bor-Chest 1/4" to 1" by 1/16ths	43699	–

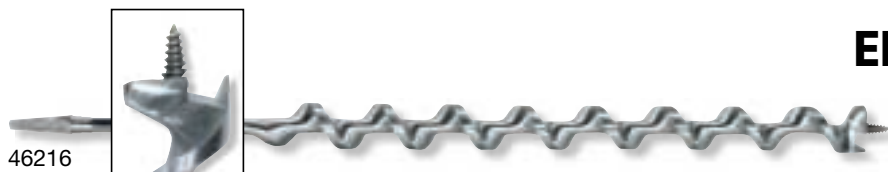
# IRWIN® HAND BRACE AUGER BITS

## Long Solid Center Wood Auger Bits - 65T Series 18" OL\* 12" Twist



Diameter	Bulk Stock #
1/4"	47704
5/16"	47705
3/8"	47706
7/16"	47707
1/2"	47708
9/16"	47709
5/8"	47710
11/16"	47711
3/4"	47712
13/16"	47713
7/8"	47714
15/16"	47715
1"	47716
<hr/>	
1-1/16"	47717
1-1/8"	47718
1-1/4"	47720
1-3/8"	47722
1-1/2"	47724

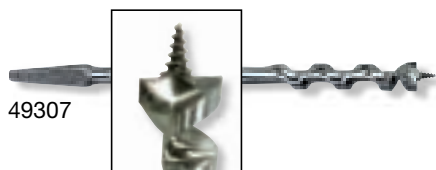
- Balanced cutting head with medium-fast screw pitch bores cleaner and faster
- Heat-treated and tempered full length for extra strength
- Double-spur, double-cutter
- Adapter Shank Sizes  
(1/4" to 5/8") Hex Not Available  
(11/16" to 1-1/16") 5/16" Hex Shank  
(1-1/8" to 1-1/2") 7/16" Hex Shank



## Electrician's Auger Bits

Diameter	3E 10" OL 6" Twist Bulk Stock #	35T 18" OL 12" Twist Bulk Stock #
1/4"	—	46204
3/8"	—	46206
1/2"	—	46208
5/8"	—	46210
11/16"	45811	46211
3/4"	—	46212
13/16"	—	46213
7/8"	—	46214
15/16"	—	46215
1"	—	46216

- Solid-center type with medium-screw pitch
- Single spur and cutter for fast boring
- For use by linemen, electricians, and plumbers...wherever fast boring is required
- Heat-treated full length for extra strength
- Adapter Shank Sizes  
(1/4" to 5/8") Hex Not Available  
(11/16" to 1") 5/16" Hex Shank



## Sugar Tree Tapping Bit - 91T Series 6" OL\* 2-1/2" Twist

Diameter	Bulk Stock #
7/16"	49307

- Solid-center twist design with special flat type cutter to reduce injury to tree
- Has adapter shank



# IRWIN® IMPACT WRENCH AUGER BITS

## I-100™ Impact Wrench Auger Bits



41813

Diameter	Quick Change Hex Size	12" OL* 9" Twist Bulk Stock #	18" OL* 14" TWIST Bulk Stock #
9/16"	7/16"	41209	41809
11/16"	7/16"	41211	41811
13/16"	7/16"	41213	41813
15/16"	7/16"	—	41815
1-1/16"	7/16"	—	41817

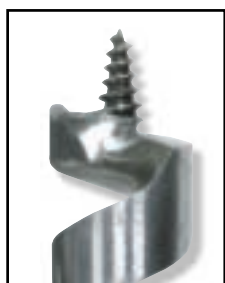
## Utility Pole Impact Wrench Auger Bits - 41H Series



47913

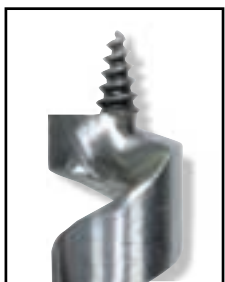


48213



Diameter	Quick Change Hex Size	41H18 18" OL* 15" Twist Bulk Stock #	41H24 24" OL* 21" Twist Bulk Stock #
9/16"	7/16"	47909	—
11/16"	7/16"	47911	48211
13/16"	7/16"	47913	48213
15/16"	7/16"	47915	48215
1-1/16"	7/16"	47917	—
9/16"	5/8"	48109	—
11/16"	5/8"	48111	48311
13/16"	5/8"	48113	48313
15/16"	5/8"	—	48315
1-1/16"	5/8"	—	48317

## Long Ship Impact Wrench Auger Bits - 51H Series



48513



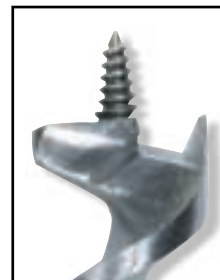
48713

Diameter	Quick Change Hex Size	51H12 12" OL* 9" Twist Bulk Stock #	51H18 18" OL* 15" Twist Bulk Stock #
1/2"	7/16"	48508	—
9/16"	7/16"	48509	48709
11/16"	7/16"	48511	48711
13/16"	7/16"	48513	48713
15/16"	7/16"	—	48715
1-1/16"	7/16"	—	48717
9/16"	5/8"	48609	—

# IRWIN® IMPACT WRENCH AUGER BITS

## Electrician's Impact Wrench Auger Bits

Diameter	Quick Change Hex Size	3H12	3H18
		12" OL* 9" Twist Bulk Stock #	18" OL* 15" Twist Bulk Stock #
9/16"	7/16"	48809	—
11/16"	7/16"	—	48911
13/16"	7/16"	48813	48913



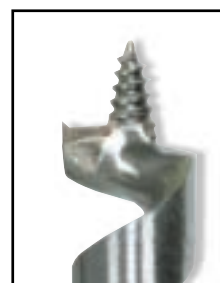
## Carbide-Tipped Impact Wrench Auger Bit

18" OL\* 15" Twist



48013

Diameter	Quick Change Hex Size	Bulk Stock #
13/16"	7/16"	48013



Wood Boring Tools

## 1/2" Female Square Socket Impact Wrench Bits

18" OL\* 15" Twist - 51S18 Series



47811

Diameter	Socket Size	Bulk Stock #
9/16"	1/2"	47809
11/16"	1/2"	47810
13/16"	1/2"	47811

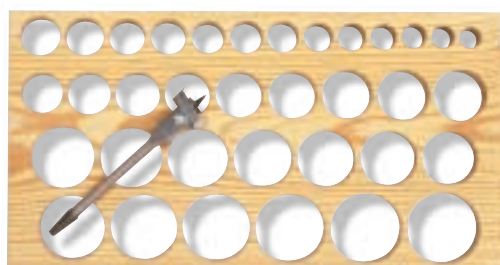
- Quick-release button
- Heat-treated full length for extra strength
- For general construction work
- Single cutter and side lip
- Hollow-center design



\*OL = Overall Length

# IRWIN® ADJUSTABLE WOOD BITS

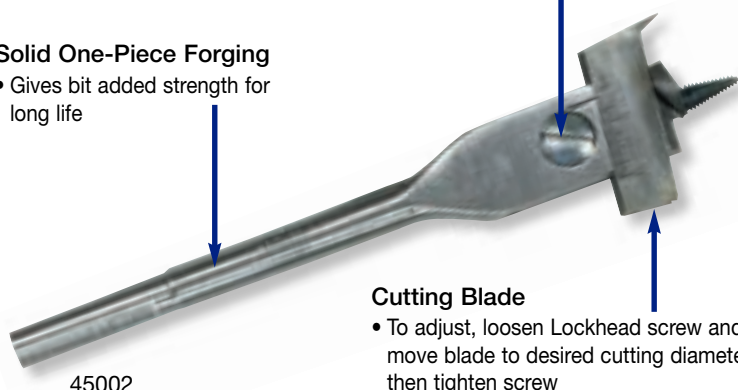
## 35 Diameters - In One Bit!



- 5/8" to 1-3/4" size will cut 19 standard hole sizes in increments of 1/8"
- 7/8" to 3" will cut 35 hole sizes in increments of 1/8" (pictured above)

### Solid One-Piece Forging

- Gives bit added strength for long life



### Lockhead Screw

- Securely holds blade to desired boring diameter

### Cutting Blade

- To adjust, loosen Lockhead screw and move blade to desired cutting diameter then tighten screw

45002

## Lockhead Adjustable Wood Bits - Drill Press

Boring Range Diameter	Cutting Blades Included	Drill Press Shank Size	Overall Length	Pouched Stock #
5/8" - 1-3/4"	44031, 44032	9/32"	5-1/2"	44801
7/8" - 3"	44233, 44234	11/32"	6-1/2"	45002

## Lockhead Adjustable Wood Bits - Hand Brace



44202

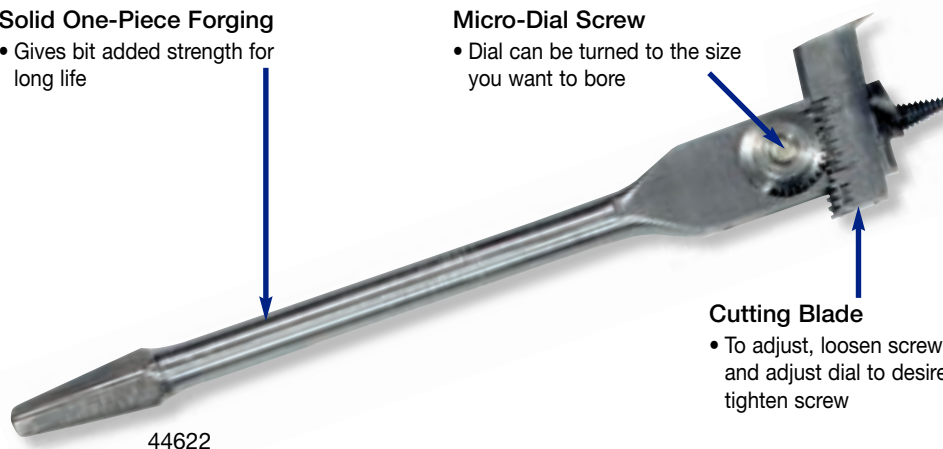
Boring Range Diameter	Cutting Blades Included	Shank	Overall Length	Pouched Stock #
5/8" - 1-3/4"	44031, 44032	Taper	7-1/8"	44001
7/8" - 3"	44233, 44234	Square	8-1/8"	44202

### Solid One-Piece Forging

- Gives bit added strength for long life

### Micro-Dial Screw

- Dial can be turned to the size you want to bore



### Cutting Blade

- To adjust, loosen screw behind Micro-Dial head and adjust dial to desired cutting diameter then tighten screw

44622

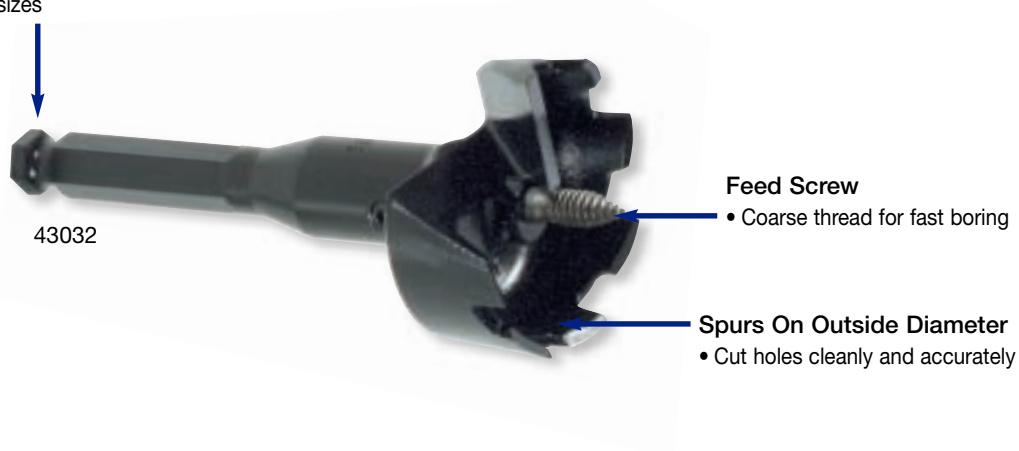
## Micro-Dial, Adjustable Wood Bits - Hand Brace

Boring Range Diameter	Cutting Blades Included	Shank	Overall Length	Pouched Stock #
5/8" - 1-3/4"	44411, 44412	Taper	7-1/8"	44421
7/8" - 3"	44613, 44614	Square	8-1/8"	44622

# IRWIN® SELF-FEED WOOD BITS

## Quick Change Impact Shank

- On all sizes



## Self-Feed Wood Bits

- Drill large diameter holes in wood for pipe, conduit and other applications
- Effortless cutting, even in gummy wood
- Each bit is packaged with one hex key and two feed screws

Diameter	Hex Size	Boxed Stock #
1"	7/16"	43016
1-1/8"	7/16"	43018
1-1/4"	7/16"	43020
1-3/8"	7/16"	43022
1-1/2"	7/16"	43024
1-3/4"	7/16"	43028
2"	7/16"	43032
2-1/8"	7/16"	43034
2-1/4"	7/16"	43036
2-9/16"	7/16"	43041
3"	7/16"	43047
3-5/8"	7/16"	43058
4-5/8"	7/16"	43074



# IRWIN® FORSTNER BITS

## Reduced Shank

- Fits 3/8" and larger drills and drill presses

42932



## Brad Point

- Starts the bit cleanly, even on uneven surfaces

## Forstner Bits - 3-1/2" OL\*



42932

Diameter	Round Shank Diameter	Clamshell Stock #
1/4"	.250"	42904
3/8"	.250"	42906
1/2"	.315"	42908
5/8"	.315"	42910
3/4"	.375"	42912
7/8"	.375"	42914
1"	.375"	42916
1-1/8"	.375"	42918
1-1/4"	.375"	42920
1-3/8"	.375"	42922
1-1/2"	.375"	42924
1-5/8"	.375"	42926
1-3/4"	.375"	42928
1-7/8"	.375"	42930
2"	.375"	42932
2-1/8"	.375"	42934

## 4" Forstner Bit Extension

- Includes hex key



42936

Description	Three Flatted Shank Diameter	Carded Stock #
For use with .375" Shank Bits	.375"	42936

## Forstner Bit Set



42940

Description	Contents	Boxed Stock #
4 pc Set	5/8", 3/4", 7/8", 1"	42940

# IRWIN® WOOD BORING BITS



49618

Diameter	Carded Stock #
1/8"	49612
3/16"	49613
1/4"	49614
5/16"	49615
3/8"	49616
7/16"	49617*
1/2"	49618*

\*7/16" and 1/2" bits have 3/8" reduced shanks

## Brad Point Drill Bits

- Precision-ground for use in furniture making, doweling, cabinetry, and other woodworking applications where an exact hole size is required
- The spurred cutting head is designed to reduce splintering and ensure a smooth, clean hole
- Wide flutes provide a fast, continuous flow of chips



49600

Description	Contents	Pouched Stock #
5 pc Set	3/16", 1/4", 5/16", 3/8", 1/2"	49600

## Brad Point Drill Bit Set



43910

Plug Diameter	Round Shank Diameter	Carded Stock #
1/4"	1/4"	43904
3/8"	1/4"	43906
1/2"	1/4"	43908
5/8"	1/4"	43910

## Plug Cutters

- For covering fastener holes in furniture, cabinetry, floors, decks, and other woodworking projects
- Made of hardened, high-carbon steel
- Makes dowels

# IRWIN® HAND BRACE INSTALLER BITS

## Full Length Heat Treatment

- For industrial use

## Premium Alloy Steel

- Enables user to bore in a variety of materials (plaster, metal lath) encountered while installing wire

## Application:

- For installing small wire for telephones, cable TV, computers, security systems, and other applications

## 82° Point

- For fast boring in all types of wood

## Hole In Flute

- Makes it easy to pull wire through walls, ceilings and floors



## 12" Length Bits Taper Square



38508

Diameter	Bulk Stock #
3/16"	38503
1/4"	38504
5/16"	38505
3/8"	38506
1/2"	38508

## 18" Length Bits Taper Square



38608

Diameter	Bulk Stock #
3/16"	38603
1/4"	38604
5/16"	38605
3/8"	38606
7/16"	38607
1/2"	38608
5/8"	38610
11/16"	38611
3/4"	38612

## 24" Length Bits Taper Square



38708

Diameter	Bulk Stock #
3/16"	38703
1/4"	38704
5/16"	38705
3/8"	38706
1/2"	38708

## 30" Length Bits Taper Square



38806

Diameter	Bulk Stock #
1/4"	38804
3/8"	38806

# IRWIN® POWER DRILL INSTALLER BITS



38908

## 12" Length Bits

Diameter	Shank Diameter	Bulk Stock #
1/4"	.230"	38904
5/16"	.285"	38905
3/8"	.370"	38906
7/16"	.370"	38907
1/2"	.370"	38908
9/16"	.370"	38909
5/8"	.370"	38910
11/16"	.370"	38911
3/4"	.370"	38912



39008

## 18" Length Bits

Diameter	Shank Diameter	Pouched Stock #	Bulk Stock #
1/4"	.230"	39104	39004
5/16"	.285"	39105	39005
3/8"	.370"	39106	39006
7/16"	.370"	39107	39007
1/2"	.370"	39108	39008
9/16"	.370"	39109	39009
5/8"	.370"	39110	39010
11/16"	.370"	39111	39011
3/4"	.370"	39112	39012

Wood Boring Tools



39408

## 24" Length Bits

Diameter	Shank Diameter	Pouched Stock #	Bulk Stock #
1/4"	.230"	39504	39404
5/16"	.285"	39505	39405
3/8"	.370"	39506	39406
1/2"	.370"	39508	39408



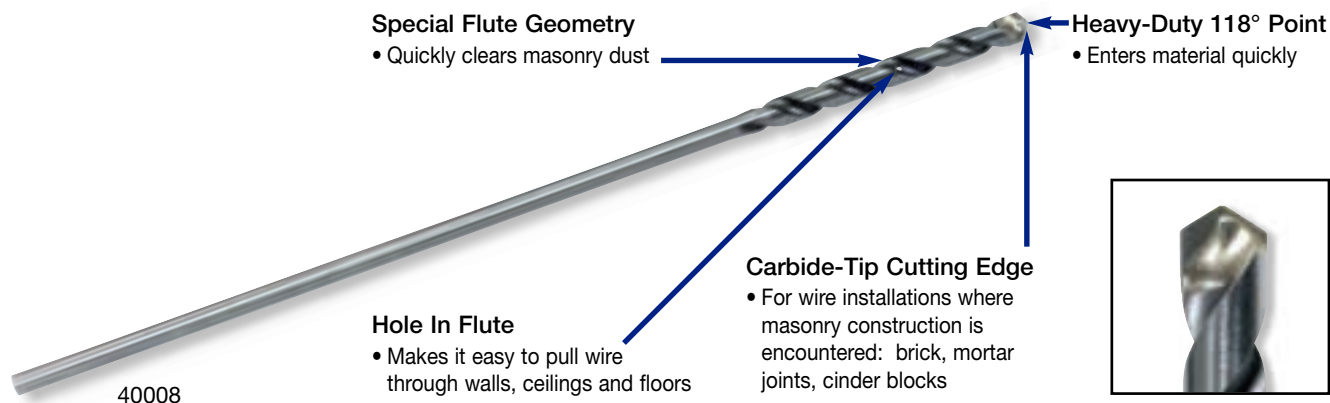
39608

## 30" Length Bits

Diameter	Shank Diameter	Bulk Stock #
1/4"	.230"	39604
5/16"	.285"	39605
3/8"	.370"	39606
1/2"	.370"	39608



# IRWIN® MASONRY INSTALLER BITS



## 12" Length Bits - Taper Square



Diameter	Bulk Stock #
1/4"	39704
3/8"	39706

## 18" Length Bits - Taper Square



Diameter	Bulk Stock #
1/4"	39804
5/16"	39805
3/8"	39806
1/2"	39808

## 12" Length Bits - Power Drill



Diameter	Shank Diameter	Bulk Stock #
1/4"	.245"	39904
5/16"	.250"	39905
3/8"	.370"	39906

## 18" Length Bits - Power Drill



Diameter	Shank Diameter	Bulk Stock #
1/4"	.245"	40004
5/16"	.250"	40005
3/8"	.370"	40006
1/2"	.370"	40008
5/8"	.370"	40010
3/4"	.370"	40012

# **Drill Bits**



**High Speed Steel  
Drill Bits**

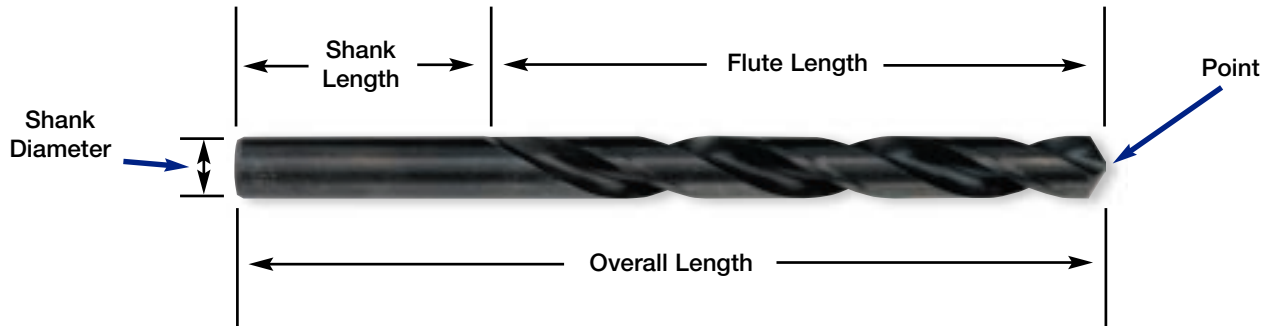
**Cobalt Drill Bits**

**Titanium Nitride  
Coated Drill Bits**

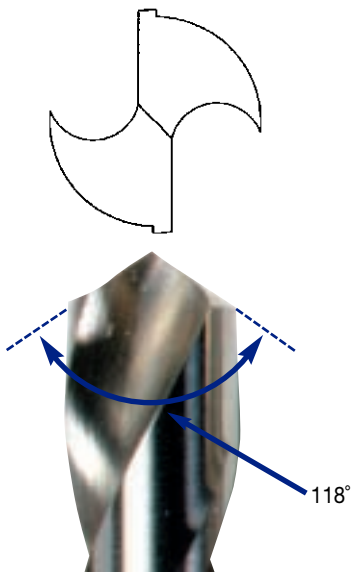
# HANSON® DRILL BITS

The following information is included to help you choose  
the right drill bit for your particular requirements

## Terminology

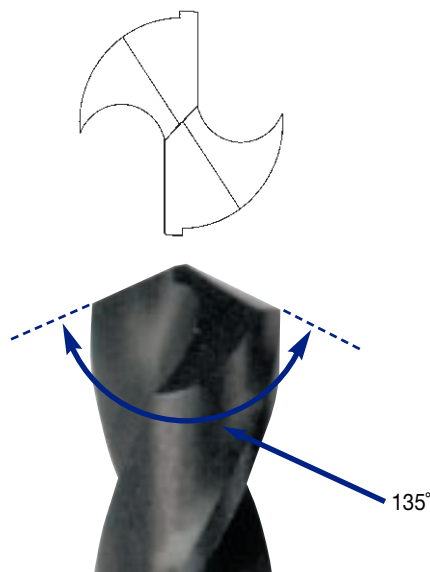


## Point Types



### 118° Point

- General Purpose



### 135° Split Point

- For drilling tougher, harder materials, less tendency to "walk"



### JET POINT® (TURBOMAX®)

- Specially ground to stay sharp longer and drill faster

## Material Types

### High Speed Steel (HSS)

- General Purpose
- Recommended for most drilling applications

### Cobalt

- Recommended for drilling through alloys, stainless steel, etc.

### Titanium Nitride (TiN) Coated

- Reduces friction - very wear resistant
- Ideal for production work and repetitive drilling

See pages 13-28 and 13-29 for overall length and flute length specifications



**SAFETY INSTRUCTIONS:** Failure to follow warnings may result in bodily injury.  
**WARNING:** ALWAYS wear safety goggles to protect your eyes and wear other appropriate safety items for protection.



# HANSON® HIGH SPEED STEEL DRILL BITS

## Economy HSS Fractional Straight Shank Jobbers Length - 609/607 Series



60724

- Economical high speed steel for general drilling
- Black oxide finish for corrosion resistance
- 118° point

Diameter	Carded Stock #	Bulk Stock #
1/16"	60904*	60704
5/64"	60905*	60705
3/32"	60906*	60706
7/64"	60907*	60707
1/8"	60908*	60708
9/64"	60909	60709
5/32"	60910	60710
11/64"	60911	60711
3/16"	60912	60712
13/64"	60913	60713
7/32"	60914	60714
15/64"	60915	60715
1/4"	60916	60716
17/64"	60917	60717
9/32"	60918	60718
19/64"	60919	60719
5/16"	60920	60720
21/64"	60921	60721
11/32"	60922	60722
23/64"	60923	60723
3/8"	60924	60724
25/64"	—	60725
13/32"	—	60726
27/64"	—	60727
7/16"	—	60728
29/64"	—	60729
15/32"	—	60730
31/64"	—	60731
1/2"	—	60732

\*2 bits per card.

## Economy HSS Fractional 3/8" Reduced Shank Jobbers Length - 638/603 Series



60328

- Economical high speed steel for general drilling
- Black oxide finish for corrosion resistance
- 118° point
- 3/8" reduced shank to fit all 3/8" drills

Diameter	Carded Stock #	Bulk Stock #
25/64"	—	60325
13/32"	63826	60326
27/64"	—	60327
7/16"	63828	60328
29/64"	—	60329
15/32"	63830	60330
31/64"	—	60331
1/2"	63832	60332



# HANSON® HIGH SPEED STEEL DRILL BITS

## Economy HSS Fractional Straight Shank - Jobbers Length 609 Series - Plastic Case Sets



60934

Description	Contents	Carded Stock #
7 pc Set	1/16" through 1/4" by 32nds	60940
10 pc Set	1/16" through 1/4" by 64ths*	60955
13 pc Set	1/16" through 1/4" by 64ths	60934

\*11/64", 13/64" and 15/64" not included.

## Economy HSS Fractional Jobbers Length 607 Series - Metal Index Sets



60738

Description	Contents	Stock #
13 pc Set	1/16" through 1/4" by 64ths	60736
15 pc Set	1/16" through 1/2" by 32nds	60737
29 pc Set	1/16" through 1/2" by 64ths	60738
29 pc Set	Empty Metal Index for 60738	60738MT
29 pc Set	1/16" through 1/2" by 64ths with 3/8" Reduced Shank	60748

# HANSON® HIGH SPEED STEEL DRILL BITS

## General Purpose HSS Fractional Straight Shank Jobbers Length - 605/601 Series



60124

- For general use in metal, wood and plastic
- 118° standard point, bright finish

Diameter	Carded Stock #	Bulk Stock #
1/64"	—	60101
1/32"	—	60102
3/64"	—	60103
1/16"	60504	60104
5/64"	60505	60105
3/32"	60506	60106
7/64"	60507	60107
1/8"	60508	60108
9/64"	60509	60109
5/32"	60510	60110
11/64"	60511	60111
3/16"	60512	60112
13/64"	60513	60113
7/32"	60514	60114
15/64"	60515	60115
1/4"	60516	60116
17/64"	60517	60117
9/32"	60518	60118
19/64"	60519	60119
5/16"	60520	60120
21/64"	60521	60121
11/32"	60522	60122
23/64"	60523	60123
3/8"	60524	60124
25/64"	60525	60125
13/32"	60526	60126
27/64"	60527	60127
7/16"	60528	60128
29/64"	60529	60129
15/32"	60530	60130
31/64"	60531	60131
1/2"	60532	60132

# HANSON® HIGH SPEED STEEL DRILL BITS

## General Purpose HSS Fractional 1/4" Reduced Shank Jobbers Length 702/714 Series

- For general use in metal, wood and plastic
- 118° standard point, bright finish
- 1/4" reduced shank to fit in all 1/4" drills



Diameter	Carded Stock #	Bulk Stock #
9/32"	70218	–
5/16"	70220	71420
11/32"	70222	–
3/8"	70224	71424
13/32"	70226	–
7/16"	70228	71428
15/32"	70230	–
1/2"	70232	71432

## General Purpose HSS Fractional 3/8" Reduced Shank Jobbers Length 738/718 Series

- For general use in metal, wood and plastic
- 118° standard point, bright finish
- 3/8" reduced shank to fit in all 3/8" drills



Diameter	Carded Stock #	Bulk Stock #
25/64"	–	71825
13/32"	73826	71826
27/64"	–	71827
7/16"	73828	71828
29/64"	–	71829
15/32"	73830	71830
31/64"	–	71831
1/2"	73832	71832

## General Purpose DRILLMINDER™ 601 Series - HSS Bit Dispensers



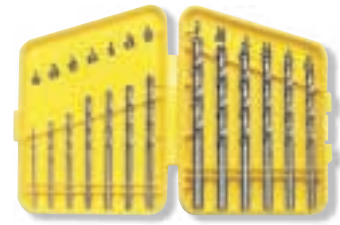
Description	Contents	Stock #
13 pc	DRILLMINDER™ Bit Dispenser 1/16" through 1/4" by 64ths	60161
	Empty Bit Dispenser for 60161	60161MT
20 pc	DRILLMINDER PLUS™ Bit Dispenser same contents as DRILLMINDER...plus 3 Phillips & 3 slotted screwdriver bits and a bit holder	60175

# HANSON® HIGH SPEED STEEL DRILL BITS

## General Purpose HSS - 601 Series Plastic Case Sets

Description	Contents	Carded Stock #	Bulk Stock #
4 pc Set	1/16", 1/8", 3/16", 1/4"	—	60139*
7 pc Set	1/16" through 1/4" by 32nds	—	60140*
7 pc Set	1/16" through 1/4" by 32nds	—	60840
10 pc Set	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"	60155	—
12 pc Set	1/16" through 1/4" by 64ths except 15/64" with Center Punch	60156	—
13 pc Set	1/16" through 1/4" by 64ths	—	60133
Empty Plastic Case for 60133		—	60133MT
13 pc Set	1/16" through 1/4" by 64ths	60134	—
13 pc Set	1/16" through 1/4" by 64ths with Gauge	60134P	—
Empty Plastic Case for 60134		—	60134MT
15 pc Set	1/16" through 1/2" by 32nds	60145	—
17 pc Set	1/16" through 1/4" by 64ths plus 9/32", 5/16", 11/32", 3/8"	60135	—
17 pc Set	1/16" through 1/4" by 64ths plus 9/32", 5/16", 11/32", 3/8"	60143	—

\*60139 and 60140 are pouched sets



60133

## General Purpose HSS - 601 Series Metal Index Sets

Description	Contents	Stock #
13 pc Set	1/16" through 1/4" by 64ths	60136
Empty Metal Index for 60136		60136MT
15 pc Set	1/16" through 1/2" by 32nds	60137
Empty Metal Index for 60137		60137MT
21 pc Set	1/16" through 3/8" by 64ths	60221
Empty Metal Index for 60221		60221MT
29 pc Set	1/16" through 1/2" by 64ths	60138
Empty Metal Index for 60138		60138MT



60137

Drill Bits

## General Purpose HSS 1/4" Reduced Shank 601 Series - Plastic Case Sets

Description	Contents	Carded Stock #
4 pc Set	5/16", 3/8", 7/16", 1/2"	70110
14 pc Set	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", 1/2" plus Center Punch	60150
15 pc Set	1/16" through 1/2" by 32nds	60146
17 pc Set	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 11/64", 3/16", 13/64", 7/32", 15/64", 1/4", 5/16", 3/8", 7/16", 1/2"	60144
17 pc Set	Same as 60144 plus Gauge	60144P
Empty Plastic Case		60144MT



# HANSON® HIGH SPEED STEEL DRILL BITS

## General Purpose HSS 1/4" Reduced Shank 601 Series - Metal Index Sets

Description	Contents	Stock #
15 pc Set	1/16" through 1/2" by 32nds	60141
29 pc Set	1/16" through 1/2" by 64ths	60142

## General Purpose HSS 3/8" Reduced Shank 601 Series - Plastic Case Sets



60149

Description	Contents	Carded Stock #	Stock #
17 pc Set	1/16" through 1/4" by 64ths	60149	–
17 pc Set	1/16" through 1/4" by 64ths with gauge	60149P	–
17 pc Set	1/16" through 1/4" by 64ths	–	60152

## General Purpose HSS 3/8" Reduced Shank 601 Series - Metal Index Sets



60160

Description	Contents	Stock #
15 pc Set	1/16" through 1/2" by 32nds	60147
29 pc Set	1/16" through 1/2" by 64ths	60148
115 pc Super Set	1/16" through 1/2" by 64ths, A through Z, 1 through 60	60160
Empty Metal Index for 60160		60160MT

# HANSON® HIGH SPEED STEEL DRILL BITS

## Heavy Duty HSS Fractional Straight Shank Jobbers Length - 635 Series



63524

Diameter	Bulk Stock#
3/64"	63503*
1/16"	63504*
5/64"	63505*
3/32"	63506
7/64"	63507
1/8"	63508
9/64"	63509
5/32"	63510
11/64"	63511
3/16"	63512
13/64"	63513
7/32"	63514
15/64"	63515
1/4"	63516
17/64"	63517
9/32"	63518
19/64"	63519
5/16"	63520
21/64"	63521
11/32"	63522
23/64"	63523
3/8"	63524
25/64"	63525
13/32"	63526
27/64"	63527
7/16"	63528
29/64"	63529
15/32"	63530
31/64"	63531
1/2"	63532

\*Not split point

- Heavy duty web construction for strength & durability
- 135° split point for faster drilling
- Minimizes bit "walk"
- Black oxide coating for corrosion resistance
- Conforms to NAS-907 Type B standards

## Heavy Duty HSS Fractional 3/8" Reduced Shank Jobbers Length - 634 Series



63428

Diameter	Bulk Stock#
25/64"	63425
13/32"	63426
27/64"	63427
7/16"	63428
29/64"	63429
15/32"	63430
31/64"	63431
1/2"	63432

- 3/8" reduced shank to fit all 3/8" drills

# HANSON® HIGH SPEED STEEL DRILL BITS

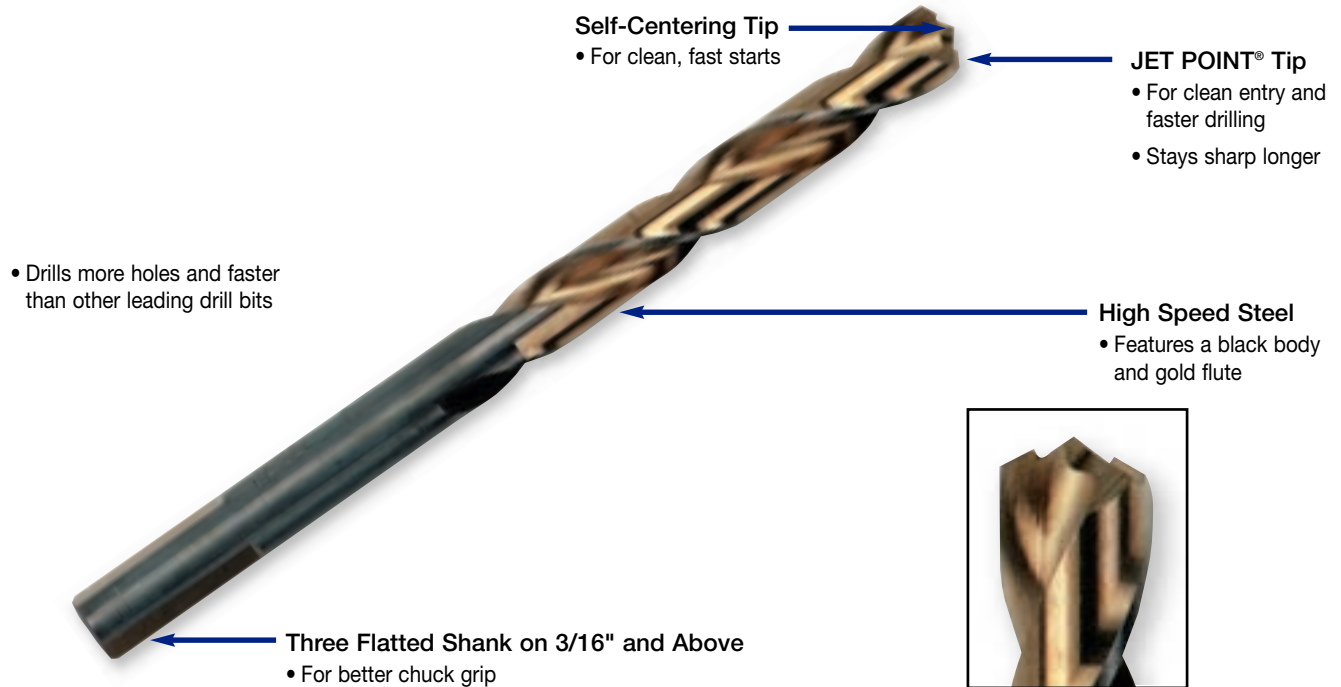
## Heavy Duty HSS Fractional Jobbers Length 635 Series - Metal Index Sets



63538

Description	Contents	Stock #
13 pc Set	1/16" through 1/4" by 64ths	63536
15 pc Set	1/16" through 1/2" by 32nds	63537
21 pc Set	1/16" through 3/8" by 64ths	63621
29 pc Set	1/16" through 1/2" by 64ths	63538
29 pc Set	1/16" through 1/2" by 64ths with 3/8" Reduced Shank	63548

# TURBOMAX® DRILL BITS



## TURBOMAX® HSS Fractional Straight Shank 733/731 Series

Diameter	Carded Stock #	Bulk Stock #
1/16"	73304**	73104
5/64"	73305**	73105
3/32"	73306**	73106
7/64"	73307**	73107
1/8"	73308	73108
9/64"	73309	73109
5/32"	73310	73110
11/64"	73311	73111
3/16"	73312	73112
13/64"	73313	73113
7/32"	73314	73114
15/64"	73315	73115
1/4"	73316	73116
17/64"	73317	73117
9/32"	73318	73118
19/64"	73319	73119
5/16"	73320	73120
21/64"	73321	73121
11/32"	73322	73122
23/64"	73323	73123
3/8"	73324	73124
25/64"	73325	73125
13/32"	73326	73126
27/64"	73327	73127
7/16"	73328	73128
29/64"	73329	73129
15/32"	73330	73130
31/64"	73331	73131
1/2"	73332	73132

\*135° split point    \*\*2 bits per card



# TURBOMAX® DRILL BITS

## TURBOMAX® HSS 3/8" Reduced Shank 736/734 Series

- 3/8" reduced shank to fit all 3/8" drills



73428

Diameter	Carded Stock #	Bulk Stock #
25/64"	73625	73425
13/32"	73626	73426
27/64"	73627	73427
7/16"	73628	73428
29/64"	73629	73429
15/32"	73630	73430
31/64"	73631	73431
1/2"	73632	73432

## TURBOMAX® HSS Fractional - 733 Series Plastic Case Sets



73334

Description	Contents	Carded Stock #
7 pc Set	1/16" through 1/4" by 32nds	73340
10 pc Set	1/16" through 5/32" by 64ths plus 3/16", 7/32", 1/4"	73355
13 pc Set	1/16" through 1/4" by 64ths	73334

## TURBOMAX® HSS Fractional - 731 Series Metal Index Sets



73136

Description	Contents	Bulk Stock #
13 pc Set	1/16" through 1/4" by 64ths	73136
15 pc Set	1/16" through 1/2" by 32nds	73137
21 pc Set	1/16" through 3/8" by 64ths	73149
29 pc Set	1/16" through 1/2" by 64ths	73138
29 pc Set	1/16" through 1/2" by 64ths with 3/8" Reduced Shank	73148

# HANSON® COBALT DRILL BITS



63124

## Cobalt Fractional Straight Shank Jobbers Length 633/631 Series

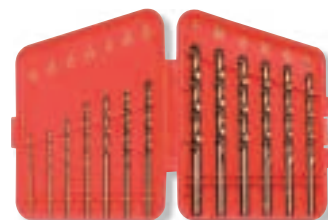
- 135° split point begins drilling immediately, minimizing bit "walk"
- Heavy-duty web construction for strength & durability
- 8% cobalt for much higher hot hardness and abrasion resistance
- Recommended for drilling hardened steel, super alloys, titanium and stainless steel

Diameter	Carded Stock #	Bulk Stock #
3/64"	—	63103*
1/16"	63304*	63104*
5/64"	63305*	63105*
3/32"	63306	63106
7/64"	63307	63107
1/8"	63308	63108
9/64"	63309	63109
5/32"	63310	63110
11/64"	63311	63111
3/16"	63312	63112
13/64"	63313	63113
7/32"	63314	63114
15/64"	63315	63115
1/4"	63316	63116
17/64"	63317	63117
9/32"	63318	63118
19/64"	63319	63119
5/16"	63320	63120
21/64"	63321	63121
11/32"	63322	63122
23/64"	63323	63123
3/8"	63324	63124
25/64"	63325	63125
13/32"	63326	63126
27/64"	63327	63127
7/16"	63328	63128
29/64"	63329	63129
15/32"	63330	63130
31/64"	63331	63131
1/2"	63332	63132

\*Not split point

## Cobalt Fractional Straight Shank Jobbers Length - 631 Series - Plastic Case Sets

Description	Contents	Carded Stock #
7 pc Set	1/16" through 1/4" by 32nds	63140
10 pc Set	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32" 3/16", 7/32", 1/4"	63155
13 pc Set	1/16" through 1/4" by 64ths	63134



63134

## Cobalt Fractional Straight Shank Jobbers Length - 631 Series - Metal Index Sets

Description	Contents	Stock #
13 pc Set	1/16" through 1/4" by 64ths	63136
15 pc Set	1/16" through 1/2" by 32nds	63137
21 pc Set	1/16" through 3/8" by 64ths	63221
29 pc Set	1/16" through 1/2" by 64ths	63138



63221

Drill Bits

# HANSON® TITANIUM NITRIDE COATED DRILL BITS

## TiN Coated Jobbers Length - 639/637 Series

- 135° split point begins drilling immediately minimizing bit "walk"
- Titanium nitride coating. This gold colored coating lasts up to six times longer than standard high speed steel drill bits
- Reduces friction, very wear resistant
- Coating is very hard, approximately 80 Rockwell C (20% harder than Cobalt)
- Ideal for production work or repetitive drilling



63724

Diameter	Carded Stock #	Bulk Stock #
1/16"	63904 *	63704 *
5/64"	63905 *	63705 *
3/32"	63906	63706
7/64"	63907	63707
1/8"	63908	63708
9/64"	63909	63709
5/32"	63910	63710
11/64"	63911	63711
3/16"	63912	63712
13/64"	63913	63713
7/32"	63914	63714
15/64"	63915	63715
1/4"	63916	63716
17/64"	-	63717
9/32"	63918	63718
19/64"	-	63719
5/16"	63920	63720
21/64"	-	63721
11/32"	63922	63722
23/64"	-	63723
3/8"	63924	63724
25/64"	-	63725
13/32"	63926	63726
27/64"	-	63727
7/16"	63928	63728
29/64"	-	63729
15/32"	63930	63730
31/64"	-	63731
1/2"	63932	63732

\*Not split point

## TiN Coated Jobbers Length - 637 Series - Plastic Case Sets



63734

Description	Contents	Carded Stock #
7 pc Set	1/16" through 1/4" by 32nds	63740
10 pc Set	1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32" 3/16", 7/32", 1/4"	63755
13 pc Set	1/16" through 1/4" by 64ths	63734

## TiN Coated Jobbers Length - 637 Series - Metal Index Sets



63738

Description	Contents	Stock #
13 pc Set	1/16" through 1/4" by 64ths	63736
15 pc Set	1/16" through 1/2" by 32nds	63737
29 pc Set	1/16" through 1/2" by 64ths	63738

# HANSON® HIGH SPEED STEEL DRILL BITS

## HSS Wire Gauge Straight Shank Jobbers Length - 801 Series



80101

- Numbered from 1 to 80 (large to small)
- Used where more precisely sized holes are required
- 118° point
- Drills exact size hole for tapping

Diameter	Decimal Equivalent	Carded Stock #	Bulk Stock #
No. 1	.2280	81101	80101
No. 2	.2210	81102	80102
No. 3	.2130	81103	80103
No. 4	.2090	81104	80104
No. 5	.2055	81105	80105
No. 6	.2040	81106	80106
No. 7	.2010	81107	80107
No. 8	.1990	81108	80108
No. 9	.1960	81109	80109
No. 10	.1935	81110	80110
No. 11	.1910	81111	80111
No. 12	.1890	81112	80112
No. 13	.1850	81113	80113
No. 14	.1820	81114	80114
No. 15	.1800	81115	80115
No. 16	.1770	81116	80116
No. 17	.1730	81117	80117
No. 18	.1695	81118	80118
No. 19	.1660	81119	80119
No. 20	.1610	81120	80120
No. 21	.1590	81121	80121
No. 22	.1570	81122	80122
No. 23	.1540	81123	80123
No. 24	.1520	81124	80124
No. 25	.1495	81125	80125
No. 26	.1470	81126	80126
No. 27	.1440	81127	80127
No. 28	.1405	81128	80128
No. 29	.1360	81129	80129
No. 30	.1285	81130	80130
No. 31	.1200	81131	80131
No. 32	.1160	81132	80132
No. 33	.1130	81133	80133
No. 34	.1110	81134	80134
No. 35	.1100	81135	80135
No. 36	.1065	81136	80136
No. 37	.1040	81137	80137
No. 38	.1015	81138	80138
No. 39	.0995	81139	80139
No. 40	.0980	81140	80140
No. 41	.0960	81141	80141
No. 42	.0935	81142	80142
No. 43	.0890	81143	80143
No. 44	.0860	81144	80144
No. 45	.0820	81145	80145
No. 46	.0810	81146	80146
No. 47	.0785	81147	80147
No. 48	.0760	81148	80148
No. 49	.0730	81149	80149
No. 50	.0700	81150	80150
No. 51	.0670	81151	80151

Continued on next page



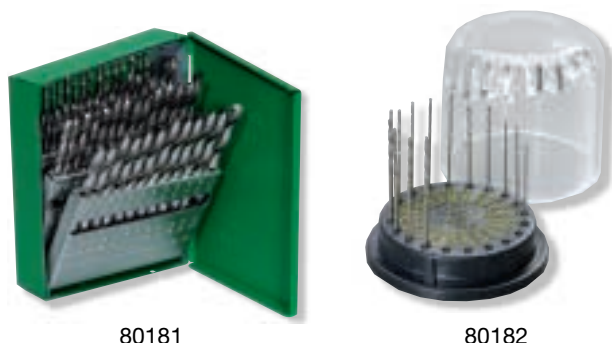
# HANSON® HIGH SPEED STEEL DRILL BITS

## HSS Wire Gauge Straight Shank Jobbers Length - 801 Series (Cont.)

Description	Decimal Equivalent	Carded Stock #	Bulk Stock #
No. 52	.0635	81152	80152
No. 53	.0595	81153	80153
No. 54	.0550	81154	80154
No. 55	.0520	81155	80155
No. 56	.0465	81156	80156
No. 57	.0430	81157	80157
No. 58	.0420	81158	80158
No. 59	.0410	81159	80159
No. 60	.0400	81160	80160
No. 61	.0390	—	80161
No. 62	.0380	—	80162
No. 63	.0370	—	80163
No. 64	.0360	—	80164
No. 65	.0350	—	80165
No. 66	.0330	—	80166
No. 67	.0320	—	80167
No. 68	.0310	—	80168
No. 69	.0292	—	80169
No. 70	.0280	—	80170
No. 71	.0260	—	80171
No. 72	.0250	—	80172
No. 73	.0240	—	80173
No. 74	.0225	—	80174
No. 75	.0210	—	80175
No. 76	.0200	—	80176
No. 77	.0180	—	80177
No. 78	.0160	—	80178
No. 79	.0145	—	80179
No. 80	.0135	—	80180

Drill Bits

## HSS Wire Gauge Straight Shank Jobbers Length - 801 Series - Sets



80181

80182

Description	Contents	Stock #
60 pc Set	No. 1-60	80181
Empty Metal Index for 80181		80181MT
20 pc Set	No. 61-80 in Plastic Dome	80182
Empty Dome for 80182		80182MT
20 pc Set	No. 61-80 Metal Index	80183
Empty Metal Index for 80183		80183MT

# HANSON® HIGH SPEED STEEL DRILL BITS

## Letter Size HSS Straight Shank Jobbers Length - 401 Series



40109

- Lettered from A-Z (small to large)
- Used where more precisely sized holes are required in larger sizes than number drills
- 118° point, bright finish
- Drills exact size hole for tapping

Description	Decimal Equivalent	Carded Stock #	Bulk Stock #
Letter A	.2340	–	40101
Letter B	.2380	–	40102
Letter C	.2420	–	40103
Letter D	.2460	–	40104D
Letter E	.2500	–	40105D
Letter F	.2570	41106	40106
Letter G	.2610	–	40107
Letter H	.2660	–	40108
Letter I	.2720	41109	40109
Letter J	.2770	41110	40110D
Letter K	.2810	–	40111D
Letter L	.2900	–	40112
Letter M	.2950	–	40113
Letter N	.3020	41114	40114
Letter O	.3160	41115	40115
Letter P	.3230	41116	40116
Letter Q	.3320	41117	40117
Letter R	.3390	41118	40118
Letter S	.3480	–	40119
Letter T	.3580	41120	40120
Letter U	.3680	41121	40121
Letter V	.3770	–	40122
Letter W	.3860	–	40123
Letter X	.3970	–	40124
Letter Y	.4040	–	40125
Letter Z	.4130	41126	40126



40127

## Letter Size HSS Straight Shank Jobbers Length 401 Series - Metal Index Sets

Description	Contents	Stock #
26 pc Set	A-Z	40127
Empty Metal Index for 40127		40127MT

# HANSON® HIGH SPEED STEEL DRILL BITS

## Metric HSS Straight Shank Jobbers Length - 680/690 Series

- Ideal for use with metric taps
- 118° point
- Black oxide finish



68800

Description	Decimal Equivalent	Bulk Stock #
1.00 mm	.0394	68100
1.50 mm	.0591	68150
2.00 mm	.0787	68200
2.50 mm	.0984	68250
3.00 mm	.1181	68300
3.50 mm	.1378	68350
4.00 mm	.1575	68400
4.50 mm	.1772	68450
5.00 mm	.1969	68500
5.50 mm	.2165	68550
6.00 mm	.2362	68600
6.50 mm	.2559	68650
7.00 mm	.2756	68700
7.50 mm	.2953	68750
8.00 mm	.3150	68800
8.50 mm	.3346	68850
9.00 mm	.3543	68900
9.50 mm	.3740	68950
10.00 mm	.3937	69010
10.50 mm	.4134	69015
11.00 mm	.4331	69110
11.50 mm	.4528	69115
12.00 mm	.4724	69120
12.50 mm	.4921	69125
13.00 mm	.5118	69130

Drill Bits

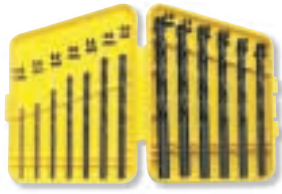
## Metric HSS Straight Shank - Jobbers Length 680 Series - Metal Index Sets



68025

Description	Contents	Stock #
25 pc Set	1 mm through 13 mm by .5 mm	68025
Empty Metal Index for 68025		68025MT

# HANSON® HIGH SPEED STEEL DRILL BITS



68013

## Metric HSS Straight Shank - Jobbers Length 680/690 Series - Plastic Case Set

Description	Contents	Carded Stock #	Stock #
13 pc Set	1.5 mm through 7.5 mm by .5 mm	60260	–
13 pc Set	1.5 mm through 7.5 mm by .5 mm	–	68013

## HSS Screw Machine Length Fractional 301 Series



30124

- Also known as "stubbies"
- Shorter length for increased strength and rigidity
- 135° split point
- Black oxide finish
- Ideal for industrial applications

Diameter	Bulk Stock #
1/16"	30104*
5/64"	30105*
3/32"	30106
7/64"	30107
1/8"	30108
9/64"	30109
5/32"	30110
11/64"	30111
3/16"	30112
13/64"	30113
7/32"	30114
15/64"	30115
1/4"	30116
17/64"	30117
9/32"	30118
19/64"	30119
5/16"	30120
21/64"	30121
11/32"	30122
23/64"	30123
3/8"	30124
25/64"	30125
13/32"	30126
27/64"	30127
7/16"	30128
29/64"	30129
15/32"	30130
31/64"	30131
1/2"	30132

\*Regular 135° point, not split point.



# HANSON® HIGH SPEED STEEL DRILL BITS

## HSS Wire Gauge Screw Machine Length 201 Series

- Numbered from 1 through 60 (large to small)
- Used where more precisely sized holes are required
- 135° split point
- Drills exact size hole for tapping
- Shorter length for increased strength and rigidity



20101

Description	Decimal Equivalent	Bulk Stock #
No. 1	.2280	20101
No. 2	.2210	20102
No. 3	.2130	20103
No. 4	.2090	20104
No. 5	.2055	20105
No. 6	.2040	20106
No. 7	.2010	20107
No. 8	.1990	20108
No. 9	.1960	20109
No. 10	.1935	20110
No. 11	.1910	20111
No. 12	.1890	20112
No. 13	.1850	20113
No. 14	.1820	20114
No. 15	.1800	20115
No. 16	.1770	20116
No. 17	.1730	20117
No. 18	.1695	20118
No. 19	.1660	20119
No. 20	.1610	20120
No. 21	.1590	20121
No. 22	.1570	20122
No. 23	.1540	20123
No. 24	.1520	20124
No. 25	.1495	20125
No. 26	.1470	20126
No. 27	.1440	20127
No. 28	.1405	20128
No. 29	.1360	20129
No. 30	.1285	20130
No. 31	.1200	20131
No. 32	.1160	20132
No. 33	.1130	20133
No. 34	.1110	20134
No. 35	.1100	20135
No. 36	.1065	20136
No. 37	.1040	20137
No. 38	.1015	20138
No. 39	.0995	20139
No. 40	.0980	20140
No. 41	.0960	20141
No. 42	.0935	20142
No. 43	.0890	20143
No. 44	.0860	20144
No. 45	.0820	20145
No. 46	.0810	20146
No. 47	.0785	20147
No. 48	.0760	20148
No. 49	.0730	20149
No. 50	.0700	20150
No. 51	.0670	20151

Continued on next page

# HANSON® HIGH SPEED STEEL DRILL BITS

## HSS Wire Gauge Screw Machine Length 201 Series (Cont.)

Description	Decimal Equivalent	Bulk Stock #
No. 52	.0635	20152
No. 53	.0595	20153
No. 54	.0550	20154
No. 55	.0520	20155
No. 56	.0465	20156
No. 57	.0430	20157
No. 58	.0420	20158
No. 59	.0410	20159
No. 60	.0400	20160

## Silver and Deming (S&D) HSS Fractional 1/2" Reduced Shank - 901/911 Series



91148

- For use in 1/2" drills
- 6" overall length
- Three flatted shank for secure grip
- Carded have std. 118° point
- Tubed have 118° split point

Diameter	Carded Stock #	Tubed Stock #
33/64"	—	91133
17/32"	90134	91134
35/64"	—	91135
9/16"	90136	91136
37/64"	90137	91137
19/32"	90138	91138
39/64"	—	91139
5/8"	90140	91140
41/64"	—	91141
21/32"	90142	91142
43/64"	—	91143
11/16"	90144	91144
45/64"	—	91145
23/32"	90146	91146
47/64"	—	91147
3/4"	90148	91148
49/64"	—	91149
25/32"	90150	91150
51/64"	—	91151
13/16"	90152	91152
53/64"	—	91153
27/32"	90154	91154
55/64"	—	91155
7/8"	90156	91156
57/64"	—	91157
29/32"	90158	91158
59/64"	—	91159
15/16"	90160	91160
61/64"	—	91161
31/32"	90162	91162
63/64"	—	91163
1"	90164	91164

# HANSON® HIGH SPEED STEEL DRILL BITS

## Silver and Deming (S&D) HSS Fractional 1/2" Reduced Shank - 901 Series

- Standard shank, no flats
- Black oxide finish
- 118° point

Diameter	Pouched Stock #
1-1/64"	90165
1-1/32"	90166
1-1/16"	90168
1-3/32"	90170
1-1/8"	90172
1-5/32"	90174
1-3/16"	90176
1-1/4"	90180
1-5/16"	90184
1-3/8"	90188
1-7/16"	90192
1-1/2"	90196

## Silver and Deming (S&D) HSS Fractional 1/2" Reduced Shank - 901 Series - Set



90108

Description	Contents	Stock #
8 pc Set	9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"	90108
Empty Case for 90108		90108MT

# HANSON® HIGH SPEED STEEL DRILL BITS

## HSS Fractional Straight Shank 6" Aircraft Extension - 666/667 Series



66620

- 6" overall length
- Used for drilling in hard-to-reach areas and to run wires and cable
- 135° split point with heavy duty web

Diameter	Flute Length	Carded Stock #	Bulk Stock #
3/64"	3/4"	—	66603
1/16"	7/8"	66704	66604
5/64"	1"	—	66605
3/32"	1-1/4"	—	66606
7/64"	1-1/2"	—	66607
1/8"	1-5/8"	66708	66608
9/64"	1-3/4"	—	66609
5/32"	2"	—	66610
11/64"	2-1/8"	—	66611
3/16"	2-5/16"	66712	66612
13/64"	2-7/16"	—	66613
7/32"	2-1/2"	—	66614
15/64"	2-5/8"	—	66615
1/4"	2-3/4"	66716	66616
17/64"	2-7/8"	—	66617
9/32"	2-15/16"	—	66618
19/64"	3-1/16"	—	66619
5/16"	3-3/16"	66720	66620
21/64"	3-5/16"	—	66621
11/32"	3-7/16"	—	66622
23/64"	3-1/2"	—	66623
3/8"	3-5/8"	66724	66624
25/64"	3-3/4"	—	66625
13/32"	3-7/8"	—	66626
27/64"	3-15/16"	—	66627
7/16"	4-1/16"	66728	66628
15/32"	4-5/16"	—	66630
1/2"	4-1/2"	66732	66632

## HSS Fractional Straight Shank 12" Aircraft Extension - 612/621 Series



61224

- 12" overall length
- Used for drilling in hard-to-reach areas and to run wires and cable
- 135° split point with heavy duty web

Diameter	Flute Length	Carded Stock #	Bulk Stock #
1/16"	7/8"	62104	61204
3/32"	1-1/4"	—	61206
1/8"	1-5/8"	62108	61208
5/32"	2"	—	61210
3/16"	2-5/16"	62112	61212
7/32"	2-1/2"	—	61214
1/4"	2-3/4"	62116	61216
9/32"	2-15/16"	—	61218
5/16"	3-3/16"	62120	61220
11/32"	3-7/16"	—	61222
3/8"	3-5/8"	62124	61224
13/32"	3-7/8"	—	61226
7/16"	4-1/16"	62128	61228
15/32"	4-5/16"	—	61230
1/2"	4-1/2"	62132	61232



# HANSON® HIGH SPEED STEEL DRILL BITS

## Plastic and Laminate

### HSS Fractional Straight Shank - 614 Series



61416

- Specially designed for drilling plastics and laminate
- 60° point for quick penetration and reduced cracking

Diameter	Carded Stock #
1/8"	61408
5/32"	61410
3/16"	61412
1/4"	61416

## Plastic and Laminate

### HSS Fractional 1/4" Reduced Shank - 711 Series

- 1/4" reduced shank to fit 1/4" drills

Diameter	Carded Stock #
5/16"	71120
3/8"	71124
7/16"	71128
1/2"	71132

## Plastic and Laminate

### HSS Fractional 1/4" Reduced Shank

#### 711 Series - Plastic Pouch Set

Description	Contents	Pouched Stock #
8 pc Set	1/8" through 1/2"	71108

### Double End HSS Fractional - 606 Series

- Drills twice as many holes as a single end drill bit
- 135° split point
- 2" overall length



60612

Diameter	Bulk Stock #
7/64"	60607
1/8"	60608
9/64"	60609
5/32"	60610
3/16"	60612
7/32"	60614
1/4"	60616

# HANSON® HIGH SPEED STEEL DRILL BITS

## Double End HSS Wire Gauge - 611 Series

Description	Bulk Stock #
No. 11	61611
No. 20	61620
No. 30	61630

- Drills twice as many holes as a single end drill bit
- 135° split point
- 2" overall length

## Left Hand Heavy Duty HSS Fractional Straight Shank Jobbers Length - 623 Series



62324

Diameter	Bulk Stock #
1/16"	62304
5/64"	62305
3/32"	62306
7/64"	62307
1/8"	62308
9/64"	62309
5/32"	62310
11/64"	62311
3/16"	62312
13/64"	62313
7/32"	62314
15/64"	62315
1/4"	62316
17/64"	62317
9/32"	62318
19/64"	62319
5/16"	62320
21/64"	62321
11/32"	62322
23/64"	62323
3/8"	62324
25/64"	62325
13/32"	62326
27/64"	62327
7/16"	62328
29/64"	62329
15/32"	62330
31/64"	62331
1/2"	62332

- Perfect for use with screw extractors
- Heavy duty web for strength and durability
- 135° Split point
- Black oxide finish

# HANSON® HIGH SPEED STEEL DRILL BITS

## Left Hand Heavy Duty - HSS Fractional Screw Machine Length - 302 Series

- Perfect for screw extractors
- Heavy duty web for strength and durability
- 118° point
- Black oxide finish
- Shorter length for increased rigidity

Diameter	Bulk Stock #
1/16"	30204
5/64"	30205
3/32"	30206
7/64"	30207
1/8"	30208
9/64"	30209
5/32"	30210
11/64"	30211
3/16"	30212
13/64"	30213
7/32"	30214
15/64"	30215
1/4"	30216
17/64"	30217
9/32"	30218
19/64"	30219
5/16"	30220
21/64"	30221
11/32"	30222
23/64"	30223
3/8"	30224
25/64"	30225
13/32"	30226
27/64"	30227
7/16"	30228
29/64"	30229
15/32"	30230
31/64"	30231
1/2"	30232

## Left Hand Cobalt Fractional Mechanics Length - 305 Series

- For use with screw extractors
- 135° split point
- Heavy duty web for strength and durability
- Made of Cobalt HSS for use in tough metals

Diameter	Bulk Stock #
5/64"	30505
7/64"	30507
5/32"	30510
1/4"	30516
19/64"	30519

## Left Hand Cobalt Fractional Mechanics Length 305 Series - Plastic Pouch Set



Description	Contents	Pouched Stock #
5 pc Set	5/64", 7/64", 5/32", 1/4", 19/64"	30520

# HANSON® HIGH SPEED STEEL DRILL BITS

## 1/4" Hex Shank HSS Fractional 428 Series



42812

- 1/4" hex shank fits all standard drills as well as cordless power screwdrivers and most common chuck adapters

Diameter	Carded Stock #
1/16"	42804
3/32"	42806
1/8"	42808
5/32"	42810
3/16"	42812
7/32"	42814
1/4"	42816

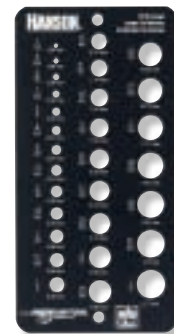
For additional Drill Bits see LOCK-N-LOAD™, Page 10-2

## 1/4" Hex Shank HSS Fractional Plastic Case Sets

Description	Contents	Stock #
4 pc Set	1/16", 1/8", 3/16", 1/4"	42839
7 pc Set	1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"	42840

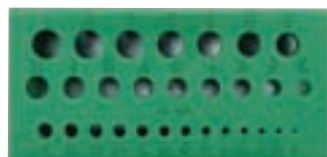
Description	Carded Stock #
Drill Gauge for Wire Gauge Bits	12085
Fractional Drill Gauge	12092

## Steel Drill Gauges

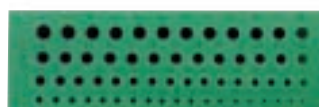


12092

Drill Bits



60172



80189

## Metal Drill Stands

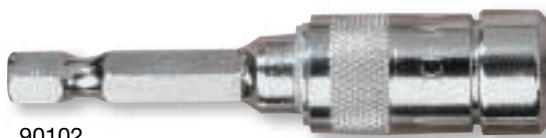
Description	Carded Stock #
Drill Stand 1/16 - 1/2 by 64ths	60172
Wire Gauge Metal Drill Bit Stand 1-60	80189



# HANSON® DRILL BITS

## Chuck Adapter

- Converts standard drill chuck to keyless quick chuck
- For use with most 1/4" hex shank drill bits, screwdriver bits and countersinks

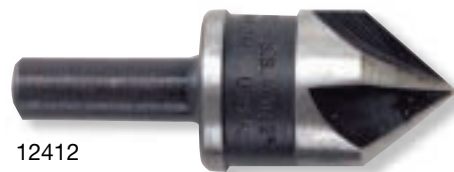


90102

Description	Carded Stock #
2" Quick Change Chuck	90102
6" Quick Change Extension	90106
12" Quick Change Extension	90112

## High Speed Steel Countersinks

- Milled and precision ground to countersink into most machinable materials....including iron, steel, soft metals, plastic or wood



12412

Diameter	Carded Stock #
1/2"	12411
5/8"	12412
3/4"	12413

Drill Bits

## Adjustable Countersinks

- 1/4" hex shank
- Countersink matches screw profile
- Hex key included for easy depth adjustment



42855

Description	Diameter of Drill Bit	Carded Stock #
No. 4 and No. 5 Screws	5/64"	42852
No. 6 and No. 7 Screws	3/32"	42855
No. 8 and No. 9 Screws	7/64"	42858
No. 10 and No. 12 Screws	9/64"	42861

For additional Countersinks see LOCK-N-LOAD™, Page 10-3

# DRILL BIT SPECIFICATIONS

Diameter / Type	Decimal Equivalent (inch)	Jobbers Overall Length	Jobbers Flute Length	Screw Machine Overall Length	Screw Machine Flute Length
1/64"	.0156	.75"	.1875"		
1/32"	.0312	1.375"	.5"		
1.0 mm	.0394	1.625"	.6875"		
60	.0400	1.625"	.6875"	1.375"	.5"
59	.0410	1.625"	.6875"	1.375"	.5"
58	.0420	1.625"	.6875"	1.375"	.5"
57	.0430	1.75"	.75"	1.375"	.5"
56	.0465	1.75"	.75"	1.375"	.5"
3/64"	.0469	1.75"	.75"		
55	.0520	1.875"	.875"	1.625"	.625"
54	.0550	1.875"	.875"	1.625"	.625"
1.5 mm	.0591	1.875"	.875"		
53	.0595	1.875"	.875"	1.625"	.625"
1/16"	.0625	1.875"	.875"	1.625"	.625"
52	.0635	1.875"	.875"	1.6875"	.6875"
51	.0670	2.0"	1.0"	1.6875"	.6875"
50	.0700	2.0"	1.0"	1.6875"	.6875"
49	.0730	2.0"	1.0"	1.6875"	.6875"
48	.0760	2.0"	1.0"	1.6875"	.6875"
5/64"	.0781	2.0"	1.0"	1.6875"	.6875"
47	.0785	2.0"	1.0"	1.6875"	.6875"
2.0 mm	.0787	2.0"	1.0"		
46	.0810	2.125"	1.125"	1.75"	.75"
45	.0820	2.125"	1.125"	1.75"	.75"
44	.0860	2.125"	1.125"	1.75"	.75"
43	.0890	2.25"	1.25"	1.75"	.75"
42	.0935	2.25"	1.25"	1.75"	.75"
3/32"	.0938	2.25"	1.25"	1.75"	.75"
41	.0960	2.375"	1.375"	1.8125"	.8125"
40	.0980	2.375"	1.375"	1.8125"	.8125"
2.5 mm	.0984	2.375"	1.375"		
39	.0995	2.375"	1.375"	1.8125"	.8125"
38	.1015	2.5"	1.4375"	1.8125"	.8125"
37	.1040	2.5"	1.4375"	1.8125"	.8125"
36	.1065	2.5"	1.4375"	1.8125"	.8125"
7/64"	.1094	2.625"	1.5"	1.8125"	.8125"
35	.1100	2.625"	1.5"	1.875"	.875"
34	.1110	2.625"	1.5"	1.875"	.875"
33	.1130	2.625"	1.5"	1.875"	.875"
32	.1160	2.75"	1.625"	1.875"	.875"
3.0 mm	.1181	2.75"	1.625"		
31	.1200	2.75"	1.625"	1.875"	.875"
1/8"	.1250	2.75"	1.625"	1.875"	.875"
30	.1285	2.75"	1.625"	1.9375"	.9375"
29	.1360	2.875"	1.75"	1.9375"	.9375"
3.5 mm	.1378	2.875"	1.75"		
28	.1405	2.875"	1.75"	1.9375"	.9375"
9/64"	.1406	2.875"	1.75"	1.9375"	.9375"
27	.1440	3.0"	1.875"	2.0625"	1.0"
26	.1470	3.0"	1.875"	2.0625"	1.0"
25	.1495	3.0"	1.875"	2.0625"	1.0"
24	.1520	3.125"	2.0"	2.0625"	1.0"
23	.1540	3.125"	2.0"	2.0625"	1.0"
5/32"	.1562	3.125"	2.0"	2.0625"	1.0"
22	.1570	3.125"	2.0"	2.125"	1.0625"
4.0 mm	.1575	3.25"	2.125"		
21	.1590	3.25"	2.125"	2.125"	1.0625"
20	.1600	3.25"	2.125"	2.125"	1.0625"
19	.1660	3.25"	2.125"	2.125"	1.0625"
18	.1695	3.25"	2.125"	2.125"	1.0625"
11/64"	.1719	3.25"	2.125"	2.125"	1.0625"
17	.1730	3.375"	2.1875"	2.1875"	1.125"
16	.1770	3.375"	2.1875"	2.1875"	1.125"
4.5 mm	.1772	3.375"	2.1875"		
15	.1800	3.375"	2.1875"	2.1875"	1.125"
14	.1820	3.375"	2.1875"	2.1875"	1.125"
13	.1850	3.5"	2.3125"	2.1875"	1.125"
3/16"	.1875	3.5"	2.3125"	2.1875"	1.125"
12	.1890	3.5"	2.3125"	2.25"	1.1875"
11	.1910	3.5"	2.3125"	2.25"	1.1875"
10	.1935	3.625"	2.4375"	2.25"	1.1875"
9	.1960	3.625"	2.4375"	2.25"	1.1875"

# DRILL BIT SPECIFICATIONS

Diameter / Type	Decimal Equivalent (inch)	Jobbers Overall Length	Jobbers Flute Length	Screw Machine Overall Length	Screw Machine Flute Length
5.0 mm	.1969	3.625"	2.4375"		
8	.1990	3.625"	2.4375"	2.25"	1.1875"
7	.2010	3.625"	2.4375"	2.25"	1.1875"
13/64"	.2031	3.625"	2.4375"	2.25"	1.1875"
6	.2040	3.75"	2.5"	2.375"	1.25"
5	.2055	3.75"	2.5"	2.375"	1.25"
4	.2090	3.75"	2.5"	2.375"	1.25"
3	.2130	3.75"	2.5"	2.375"	1.25"
5.5 mm	.2165	3.75"	2.5"		
7/32"	.2188	3.75"	2.5"	2.375"	1.25"
2	.2210	3.875"	2.625"	2.4375"	1.3215"
1	.2280	3.875"	2.625"	2.4375"	1.3215"
A	.2340	3.875"	2.625"	2.4375"	1.3215"
15/64"	.2344	3.875"	2.625"	2.4375"	1.3215"
6.0 mm	.2362	4.0"	2.75"		
B	.2380	4.0"	2.75"		
C	.2420	4.0"	2.75"		
D	.2460	4.0"	2.75"		
E	.2500	4.0"	2.75"		
1/4"	.2500	4.0"	2.75"	2.5"	1.375"
6.5 mm	.2559	4.125"	2.875"		
F	.2570	4.125"	2.875"		
G	.2610	4.125"	2.875"		
17/64"	.2656	4.125"	2.875"	2.625"	1.4375"
H	.2660	4.125"	2.875"		
I	.2720	4.125"	2.875"		
7.0 mm	.2756	4.125"	2.875"		
J	.2770	4.125"	2.875"		
K	.2810	4.25"	2.9375"		
9/32"	.2812	4.25"	2.9375"	2.6875"	1.5"
L	.2900	4.25"	2.9375"		
M	.2950	4.375"	3.0625"		
7.5 mm	.2953	4.375"	3.0625"		
19/64"	.2969	4.375"	3.0625"	2.75"	1.5625"
N	.3020	4.375"	3.0625"		
5/16"	.3125	4.5"	3.1875"	2.8125"	1.625"
8.0 mm	.3150	4.5"	3.1875"		
O	.3160	4.5"	3.1875"		
P	.3230	4.625"	3.3125"		
21/64"	.3281	4.625"	3.3125"	2.8125"	1.6875"
Q	.3320	4.75"	3.4375"		
8.5 mm	.3346	4.75"	3.4375"		
R	.3390	4.75"	3.4375"		
11/32"	.3438	4.75"	3.4375"	3.0"	1.6875"
S	.3480	4.875"	3.5"		
9.0 mm	.3543	4.875"	3.5"		
T	.3580	4.875"	3.5"		
23/64"	.3594	4.875"	3.5"	3.0625"	1.75"
U	.3680	5.0"	3.625"		
9.5 mm	.3740	5.0"	3.625"		
3/8"	.3750	5.0"	3.625"	3.125"	1.8125"
V	.3770	5.0"	3.625"		
W	.3860	5.125"	3.75"		
25/64"	.3906	5.125"	3.75"	3.25"	1.875"
10.0 mm	.3937	5.125"	3.75"		
X	.3970	5.125"	3.75"		
Y	.4040	5.25"	3.875"		
13/32"	.4062	5.25"	3.875"	3.3125"	1.9375"
Z	.4130	5.25"	3.875"		
10.5 mm	.4134	5.25"	3.875"		
27/64"	.4219	5.375"	3.9375"	3.375"	2.0"
11.0 mm	.4331	5.5"	4.0625"		
7/16"	.4375	5.5"	4.0625"	3.4375"	2.0625"
11.5 mm	.4528	5.625"	4.1875"		
29/64"	.4531	5.625"	4.1875"	3.5625"	2.125"
15/32"	.4688	5.75"	4.3125"	3.625"	2.125"
12.0 mm	.4724	5.875"	4.375"		
31/64"	.4844	5.875"	4.375"	3.6875"	2.1875"
12.5 mm	.4921	6.0"	4.5"		
1/2"	.5000	6.0"	4.5"	3.75"	2.25"
13.0 mm	.5118	6.0"	4.5"		

# ***Taps, Dies and Screw Extractors***





# HANSON® TAPS

### Material Types

- High Carbon Steel for hand tapping applications
- High Speed Steel for machine tapping where critical dimensions are required

### Etched

- Tap size and recommended drill bit size are etched on each tool for easy identification
- All HANSON® Taps and Dies are made in the USA

### Point Styles

- Taper, plug, and bottoming styles are available



Precision Ground Flutes

### POINT STYLE



8-10  
Threads

#### Taper Taps

- 8 to 10 threads chamfered for easy starting
- Longest standard chamfer
- Requires less tapping torque since they have more working teeth
- Ideal for tough threading work



3-5  
Threads

#### Plug Taps

- 3 to 5 threads chamfered
- Most common chamfer
- Ideal for all general-purpose threading



1 - 1-1/2  
Threads

#### Bottoming Taps

- 1 to 1-1/2 threads chamfered
- Shortest and least efficient standard chamfer
- Ideal for threading close to the bottom of blind holes

### Thread Type

- The size of a Tap is indicated by two numbers and two or three letters. The first number represents the diameter of the screw or bolt, the second number is the number of threads per inch. Eg. A 1/4-20 NC tap is 1/4 inch in outside diameter and is cut 20 threads per inch. The letters indicate the thread type.

Symbol	Meaning	Used on
NC (USS)	National Coarse	General purpose machines and appliances
NF (SAE)	National Fine	Automotive parts requiring extreme pressures
NS	National Special	Special threads - either diameter or threads per inch
NEF	National Extra Fine	For optical or thin wall parts
NPT	National Pipe Taper	For all pipe threads
BSP	British Standard Pipe	For all pipe threads



**SAFETY INSTRUCTIONS:** Failure to follow warnings may result in bodily injury.  
**WARNING:** ALWAYS wear safety goggles to protect your eyes and wear other appropriate safety items for protection. ALWAYS use cutting oil with cutting tools.

## High Carbon Steel Machine Screw Taps

- Ideal for routine maintenance, repair work and for re-threading where high accuracy and tolerance thread is not critical
- Straight flutes are ground to provide rapid chip removal for efficient threading
- Designed for hand threading work in a variety of materials
- Taps produce a class 2B thread



### Taper Taps

- 8 to 10 threads chamfered - easy starting



### Plug Taps

- 3 to 5 threads chamfered - general purpose threading



### Bottoming Taps

- 1 to 1-1/2 threads chamfered - used when threads must go to bottom of a hole



- Three piece set includes; one taper, one plug and one bottoming style tap
- Durable vinyl pouch protects taps

Description	No. of Flutes	3-Piece Sets Pouched Stock #	Plug Carded Stock #	Taper Bulk Stock #	Plug Bulk Stock #	Bottom Bulk Stock #
0 - 80 NF	2	2502	—	1002	1102	1202
1 - 64 NC	2	2504	—	1004	1104	1204
1 - 72 NF	2	2505	—	1005	1105	1205
2 - 56 NC	3	2506	—	1006	1106	1206
2 - 64 NF	3	2507	—	1007	1107	1207
3 - 48 NC	3	2508	—	1008	1108	1208
3 - 56 NF	3	2509	—	1009	1109	1209
4 - 36 NS	3	2511	8011	1011	1111	1211
4 - 40 NC	3	2512	8012	1012	1112	1212
4 - 48 NF	3	2513	—	1013	1113	1213
5 - 40 NC	3	2516	—	1016	1116	1216
5 - 44 NF	3	2517	—	1017	1117	1217
6 - 32 NC	3	2518	8018	1018	1118	1218
6 - 36 NS	3	2519	—	1019	1119	1219
6 - 40 NF	3	2520	—	1020	1120	1220
6 - 48 NS	3	2521	—	1021	1121	1221
8 - 32 NC	4	2524	8024	1024	1124	1224
8 - 36 NF	4	2525	—	1025	1125	1225
8 - 40 NS	4	2526	—	1026	1126	1226
10 - 24 NC	4	2528	8028	1028	1128	1228
10 - 32 NF	4	2531	8031	1031	1131	1231
12 - 24 NC	4	2532	8032	1032	1132	1232
12 - 28 NF	4	2533	—	1033	1133	1233
12 - 32 NEF	4	2534	—	1034	1134	1234
14 - 20 NS	4	2535	8035	1035	1135	1235
14 - 24 NS	4	2536	—	1036	1136	1236

# HANSON® TAPS

## High Carbon Steel Fractional Taps



### Taper Taps

- 8 to 10 threads chamfered - easy starting



### Plug Taps

- 3 to 5 threads chamfered - general purpose threading



### Bottoming Taps

- 1 to 1-1/2 threads chamfered - used when threads must go to bottom of a hole



- Three piece set includes; one taper, one plug and one bottoming style tap
- Durable vinyl pouch protects taps

Description	No. of Flutes	3-Piece Sets Pouched Stock #	Plug Carded Stock #	Taper Bulk Stock #	Plug Bulk Stock #	Bottom Bulk Stock #
1/8" - 40 NS	3	2606	—	1306	1406	1506
3/16" - 24 NS	4	2612	—	1312	1412	1512
3/16" - 32 NS	4	2613	—	1313	1413	1513
1/4" - 20 NC	4	2620	8120	1320	1420	1520
1/4" - 24 NS	4	2621	—	1321	1421	1521
1/4" - 28 NF	4	2623	8123	1323	1423	1523
1/4" - 32 NEF	4	2624	—	1324	1424	1524
1/4" - 40 NS	4	2625	—	1325	1425	1525
5/16" - 18 NC	4	2627	8127	1327	1427	1527
5/16" - 24 NF	4	2629	8129	1329	1429	1529
5/16" - 32 NEF	4	2631	—	1331	1431	1531
3/8" - 16 NC	4	2634	8134	1334	1434	1534
3/8" - 24 NF	4	2636	8136	1336	1436	1536
7/16" - 14 NC	4	2639	8139	1339	1439	1539
7/16" - 20 NF	4	2640	8140	1340	1440	1540
1/2" - 13 NC	4	2644	8144	1344	1444	1544
1/2" - 20 NF	4	2645	8145	1345	1445	1545
1/2" - 24 NS	4	2646	—	1346	1446	1546
9/16" - 12 NC	4	2648	8148	1348	1448	1548
9/16" - 18 NF	4	2649	8149	1349	1449	1549
5/8" - 11 NC	4	2652	8152	1352	1452	1552
5/8" - 18 NF	4	2654	8154	1354	1454	1554
11/16" - 11 NS	4	2656	—	1356	1456	1556
11/16" - 16 NS	4	2657	—	1357	1457	1557
3/4" - 10 NC	4	2658	8158	1358	1458	1558
3/4" - 16 NF	4	2660	8160	1360	1460	1560
7/8" - 9 NC	4	2661	—	1361	1461	1561
7/8" - 14 NF	4	2663	—	1363	1463	1563
1" - 8 NC	4	2665	—	1365	1465	1565
1" - 12 NF	4	2666	—	1366	1466	1566
1" - 14 NS	4	2667	—	1367	1467	1567

## High Carbon Steel Metric Thread Taps

- Ideal for auto repair and machinery where metric threads are specified



2738

- Three piece set includes; one taper, one plug and one bottoming style tap
- Durable vinyl pouch protects taps

Description	No. of Flutes	3-Piece Sets Pouched Stock #	Plug Carded Stock #	Plug Bulk Stock #	Bottom Bulk Stock #
3 mm - 0.50	3	2712	8312	1712	1812
3 mm - 0.60	3	—	—	1713	—
4 mm - 0.70	4	2717	8317	1717	1817
4 mm - 0.75	4	2718	8318	1718	1818
5 mm - 0.80	4	2722	8322	1722	1822
5 mm - 0.90	4	2723	8323	1723	1823
6 mm - 1.00	4	2727	8327	1727	1827
6.3 mm - 1.00	4	2729	—	1729	1829
7 mm - 1.00	4	2731	8331	1731	1831
8 mm - 1.00	4	2733	8333	1733	1833
8 mm - 1.25	4	2734	8334	1734	1834
9 mm - 0.75	4	—	8335	1735	—
9 mm - 1.00	4	—	8336	1736	—
9 mm - 1.25	4	2737	8337	1737	1837
10 mm - 1.00	4	2738	8338	1738	1838
10 mm - 1.25	4	2739	8339	1739	1839
10 mm - 1.50	4	2740	8340	1740	1840
11 mm - 1.50	4	—	8341	1741	1841
12 mm - 1.25	4	2742	8342	1742	1842
12 mm - 1.50	4	2743	8343	1743	—
12 mm - 1.75	4	2744	8344	1744	1844
14 mm - 1.25	4	2749	—	1749	1849
14 mm - 1.50	4	2750	—	1750	—
14 mm - 2.00	4	2752	—	1752	1852
16 mm - 1.00	4	—	—	1754	—
16 mm - 1.50	4	2755	—	1755	1855
16 mm - 2.00	4	2756	—	1756	1856
18 mm - 1.50	4	2759	—	1759	1859
18 mm - 2.50	4	2761	—	1761	1861
20 mm - 2.50	4	2764	—	1764	1864
22 mm - 1.50	4	2765	—	1765	1865
24 mm - 2.00	4	2768	—	1768	1868
24 mm - 3.00	4	2769	—	1769	1869



# HANSON® TAPS

## High Carbon Steel Taper Pipe Taps

- Cuts internal threads in pipes
- Nominal size of the tap is that of the pipe fitting being tapped
- Available in National Pipe Taper (NPT) and British Standard Pipe Taper (BSP)
- Ideal for pipe fittings
- Tapered at a rate of 3/4" per foot



1903

Description	No. of Flutes	Carded Stock #	Bulk Stock #
1/8" - 27 NPT	4	8202	1902
1/4" - 18 NPT	4	8203	1903
3/8" - 18 NPT	4	-	1904
1/2" - 14 NPT	4	-	1905
3/4" - 14 NPT	5	-	1906
1" - 11-1/2 NPT	5	-	1907
1-1/4" - 11-1/2 NPT	5	-	1908
1-1/2" - 11-1/2 NPT	6	-	1909
2" - 11-1/2 NPT	6	-	1910
1/8" - 28 BSP	4	-	1911
1/4" - 19 BSP	4	-	1912

## High Carbon Steel Taper Pipe Tap Set

- Wooden storage case
- Ideal for pipe fittings



1921

Description	Contents	Stock #
6 pc Set	NPT Taper Pipe Taps	1921
	Thread Size Tap Stock #	
	1/8" - 27 NPT	1902
	1/4" - 18 NPT	1903
	3/8" - 18 NPT	1904
	1/2" - 14 NPT	1905
	3/4" - 14 NPT	1906
	1" - 11-1/2 NPT	1907

Empty Wooden Case for 1921

1921 MT

## High Carbon Steel Spark Plug Taps

- Available in standard and Metric threads
- Ideal for threading or re-threading spark plug holes



2459

Description	No. of Flutes	Bulk Stock #
7/8" - 18 NS	4	2364
10 mm - 1.00	4	2438
12 mm - 1.25	4	1742
14 mm - 1.25	4	2449
18 mm - 1.50	4	2459

# HANSON® TAPS

## High Carbon Steel Spark Plug Tap Sets



25974

- Wooden storage case
- Ideal for threading or re-threading spark plug holes

Description	Contents	Stock #																		
5 pc Set	Spark Plug Tap Set	25974																		
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Stock #</th></tr> <tr> <td>10 mm - 1.00 mm</td><td>2438</td><td></td></tr> <tr> <td>12 mm - 1.25 mm</td><td>1742</td><td></td></tr> <tr> <td>14 mm - 1.25 mm</td><td>2449</td><td></td></tr> <tr> <td>18 mm - 1.50 mm</td><td>2459</td><td></td></tr> <tr> <td>Counterbore</td><td></td><td>12086</td></tr> </table>	Thread Size	Tap Stock #	Stock #	10 mm - 1.00 mm	2438		12 mm - 1.25 mm	1742		14 mm - 1.25 mm	2449		18 mm - 1.50 mm	2459		Counterbore		12086	
Thread Size	Tap Stock #	Stock #																		
10 mm - 1.00 mm	2438																			
12 mm - 1.25 mm	1742																			
14 mm - 1.25 mm	2449																			
18 mm - 1.50 mm	2459																			
Counterbore		12086																		
4 pc Set	Contents same as 25974 without the Counterbore	25978																		
	Empty Wooden Case for 25974 and 25978	25974MT																		



80185

## High Carbon Steel Tap and HSS Drill Bit Sets

- Carded sets with plastic storage cases
- These drill and tap combinations produce a thread that is strong, yet easy to tap
- 135° split point HSS drill bits ensure fast, precise drilling
- High carbon steel plug taps are ideal for general purpose threading

Description	Contents				Carded Stock #
13 pc Set	Lock and Hardware Drill and Tap Set				80185
	<u>Thread Size</u>	<u>Plug Tap Stock #</u>	<u>Drill Bit Size</u>	<u>Drill Bit Stock #</u>	
	6 - 32 NC	1118	7/64"	30107	
	8 - 32 NC	1124	No. 29	20129	
	10 - 24 NC	1128	No. 25	20125	
	10 - 32 NF	1131	No. 21	20121	
	12 - 24 NC	1132	No. 16	20116	
	1/4" - 20 NC	1420	13/64"	30113	
	<u>Threading Tools</u>			<u>Stock #</u>	
	T-Handle Tap Wrench			12401	
13 pc Set	All-Purpose Drill and Tap Set				80187
	<u>Thread Size</u>	<u>Plug Tap Stock #</u>	<u>Drill Bit Size</u>	<u>Drill Bit Stock #</u>	
	4 - 40 NC	1112	No. 43	20143	
	6 - 32 NC	1118	No. 35	20135	
	8 - 32 NC	1124	No. 29	20129	
	10 - 24 NC	1128	No. 25	20125	
	10 - 32 NF	1131	No. 21	20121	
	1/4" - 20 NC	1420	No. 7	20107	
	<u>Threading Tools</u>			<u>Stock #</u>	
	T-Handle Tap Wrench			12401	

# HANSON® TAPS

## High Carbon Steel Tap and HSS Drill Bit Sets

- Ideal for home and auto maintenance
- Durable vinyl storage pouch
- These drill and tap combinations produce a thread that is strong, yet easy to tap
- 135° split point HSS drill bits ensure fast, precise drilling
- High carbon steel plug taps are ideal for general purpose threading



Description	Contents				Pouched Stock #
10 pc Set	Tap and Drill Set - NC Thread				2700
	Thread Size	Plug Tap Stock #	Drill Bit Size	Drill Bit Stock #	
	1/4" - 20 NC	1420	13/64"	30113	
	5/16" - 18 NC	1427	17/64"	30117	
	3/8" - 16 NC	1434	5/16"	30120	
	7/16" - 14 NC	1439	3/8"	30124	
	1/2" - 13 NC	1444	27/64"	30127	
10 pc Set	Tap and Drill Set - NF Thread				2701
	Thread Size	Plug Tap Stock #	Drill Bit Size	Drill Bit Stock #	
	1/4" - 28 NF	1423	7/32"	30114	
	5/16" - 24 NF	1429	Letter I	40109	
	3/8" - 24 NF	1436	21/64"	30121	
	7/16" - 20 NF	1440	25/64"	30125	
	1/2" - 20 NF	1445	29/64"	30129	

## High Carbon Steel Tap and HSS Drill Bit Combo Packs

- These drill and tap combinations produce a thread that is strong, yet easy to tap
- High speed steel drill bits ensure fast, precise drilling
- High carbon steel plug taps are ideal for general purpose threading



Description	Carded Stock #
4 - 40 NC Tap + No. 43 Drill	80209
6 - 32 NC Tap + 7/64" Drill	80213
8 - 32 NC Tap + No. 29 Drill	80217
10 - 24 NC Tap + No. 25 Drill	80220
10 - 32 NF Tap + No. 21 Drill	80221
12 - 24 NC Tap + No. 16 Drill	80222
1/4" - 20 NC Tap + 13/64" Drill	80230
1/4" - 28 NF Tap + No. 3 Drill	80232
5/16" - 18 NC Tap + Letter G Drill	80235
3/8" - 16 NC Tap + Letter O Drill	80238
1/2" - 13 NC Tap + 27/64" Drill	80242
1/4"- 18 NPT Tap + 7/16" Drill	80260

## High Speed Steel Cut Thread Machine Screw Taps

- Ideal for maintenance and repair work and for re-threading where tougher taps and longer tool life are required
- Straight fluted, hand taps
- Designed for more demanding hand threading work in most materials including stainless steels and alloy steels
- Taps produce a class 2B thread



400023

### Taper Taps

- 8 to 10 threads chamfered - easy starting



403025

### Plug Taps

- 3 to 5 threads chamfered - general purpose threading



406025

### Bottoming Taps

- 1 to 1-1/2 threads chamfered - used when threads must go to bottom of a hole

Description	No. of Flutes	Taper Bulk Stock #	Plug Bulk Stock #	Bottom Bulk Stock #
3 - 48 NC	3	400007	403007	406007
3 - 56 NF	3	—	403008	—
4 - 40 NC	3	400009	403009	406009
4 - 36 NS	3	400010	403010	406010
4 - 48 NF	3	400012	403012	406012
5 - 40 NC	3	400013	403013	—
5 - 44 NF	3	400014	403014	—
6 - 32 NC	3	400015	403015	406015
6 - 40 NF	3	400016	403016	406016
6 - 48 NS	3	400017	403017	406017
8 - 32 NC	4	400019	403019	406019
8 - 36 NF	4	400020	403020	406020
8 - 40 NS	4	400021	403021	406021
10 - 24 NC	4	400022	403022	406022
10 - 32 NF	4	400023	403023	406023
12 - 24 NC	4	400025	403025	406025
12 - 28 NF	4	400026	403026	406026
14 - 20 NS	4	400028	403028	406028



# HANSON® TAPS

## High Speed Steel Cut Thread Fractional Taps

### Taper Taps

- 8 to 10 threads chamfered - easy starting



410022

### Plug Taps

- 3 to 5 threads chamfered - general purpose threading



413022

### Bottoming Taps

- 1 to 1-1/2 threads chamfered - used when threads must go to bottom of a hole



416022

Description	No. of Flutes	Taper Bulk Stock #	Plug Bulk Stock #	Bottom Bulk Stock #
1/4" - 20 NC	4	410010	413010	416010
1/4" - 28 NF	4	410012	413012	416012
5/16" - 18 NC	4	410015	413015	416015
5/16" - 24 NF	4	410016	413016	416016
3/8" - 16 NC	4	410018	413018	416018
3/8" - 24 NF	4	410019	413019	416019
7/16" - 14 NC	4	410020	413020	416020
7/16" - 20 NF	4	410021	413021	416021
1/2" - 13 NC	4	410022	413022	416022
1/2" - 20 NF	4	410023	413023	416023
9/16" - 12 NC	4	410024	413024	416024
9/16" - 18 NF	4	410025	413025	416025
5/8" - 11 NC	4	410026	413026	416026
5/8" - 18 NF	4	410027	413027	416027
3/4" - 10 NC	4	410028	413028	416028
3/4" - 16 NF	4	410029	413029	416029

## High Speed Steel Cut Thread Taper Pipe Taps

- Cuts internal threads in pipes
- Nominal size of the tap is that of the pipe fitting being tapped
- Ideal for pipe fittings
- Tapered at a rate of 3/4" per foot



459002

Description	No. of Flutes	Bulk Stock #
1/8" - 27 NPT	4	459001
1/4" - 18 NPT	4	459002
3/8" - 18 NPT	4	459003
1/2" - 14 NPT	4	459004
3/4" - 14 NPT	5	459005
1" - 11-1/2 NPT	5	459006
1-1/4" - 11-1/2 NPT	5	459007
1-1/2" - 11-1/2 NPT	6	459008
2" - 11-1/2 NPT	6	459009

# HANSON® TAPS

## High Speed Steel Cut Thread Taper Pipe Tap Set



1924

- Wooden storage case
- Ideal for pipe fittings where a positive seal is required

Description	Contents	Stock #														
6 pc Set	NPT Taper Pipe Set	1924														
	<table><tr><th>Thread Size</th><th>Tap Stock #</th></tr><tr><td>1/8" - 27 NPT</td><td>459001</td></tr><tr><td>1/4" - 18 NPT</td><td>459002</td></tr><tr><td>3/8" - 18 NPT</td><td>459003</td></tr><tr><td>1/2" - 14 NPT</td><td>459004</td></tr><tr><td>3/4" - 14 NPT</td><td>459005</td></tr><tr><td>1" - 11-1/2 NPT</td><td>459006</td></tr></table>	Thread Size	Tap Stock #	1/8" - 27 NPT	459001	1/4" - 18 NPT	459002	3/8" - 18 NPT	459003	1/2" - 14 NPT	459004	3/4" - 14 NPT	459005	1" - 11-1/2 NPT	459006	
Thread Size	Tap Stock #															
1/8" - 27 NPT	459001															
1/4" - 18 NPT	459002															
3/8" - 18 NPT	459003															
1/2" - 14 NPT	459004															
3/4" - 14 NPT	459005															
1" - 11-1/2 NPT	459006															



- 300325 **Taper Taps**
- 8 to 10 threads chamfered - easy starting



- 303325 **Plug Taps**
- 3 to 5 threads chamfered - general purpose threading



- 306325 **Bottoming Taps**
- 1 to 1-1/2 threads chamfered - used when threads must go to bottom of a hole

## High Speed Steel Ground Thread Machine Screw Taps

- Ideal for maintenance and repair work and for re-threading where tougher taps and longer tool life are required and precision threading is required (see H-limits as listed)
- Ground thread taps produce a tighter thread tolerance than cut thread taps
- Designed to .0005" pitch diameter tolerance
- Straight fluted, hand taps

Description	No. of Flutes	Pitch Diameter Limits	Taper Bulk Stock #	Plug Bulk Stock #	Bottom Bulk Stock #
0 - 80 NF	2	H1	—	303101	306101
1 - 64 NC	2	H1	—	303102	—
1 - 72 NC	2	H1	—	303103	306103
2 - 56 NC	3	H2	—	303205	306205
2 - 64 NF	3	H2	—	303206	—
4 - 40 NC	3	H2	—	303209	306209
4 - 48 NF	3	H2	—	303212	—
5 - 40 NC	3	H2	—	303213	306213
5 - 44 NF	3	H2	—	303214	—
6 - 32 NC	3	H3	300315	303315	—
6 - 40 NF	3	H2	—	303216	306216
8 - 32 NC	4	H3	300319	303319	306319
8 - 36 NF	4	H2	—	303220	—
10 - 24 NC	4	H3	300322	303322	306322
10 - 32 NF	4	H3	300323	303323	306323
12 - 24 NC	4	H3	300325	303325	306325
12 - 28 NF	4	H3	300326	303326	306326

# HANSON® TAPS

## High Speed Steel Ground Thread Fractional Taps

### Taper Taps

- 8 to 10 threads chamfered - easy starting



310310

### Plug Taps

- 3 to 5 threads chamfered - general purpose threading



313310

### Bottoming Taps

- 1 to 1-1/2 threads chamfered - used when threads must go to bottom of a hole



316310

Description	No. of Flutes	Pitch Diameter Limits	Taper Bulk Stock #	Plug Bulk Stock #	Bottom Bulk Stock #
1/4" - 20 NC	4	H3	310310	313310	316310
1/4" - 28 NF	4	H3	310312	313312	316312
5/16" - 18 NC	4	H3	310315	313315	316315
5/16" - 24 NF	4	H3	310316	313316	316316
3/8" - 16 NC	4	H3	310318	313318	316318
3/8" - 24 NF	4	H3	310319	313319	316319
7/16" - 14 NC	4	H3	310320	313320	316320
7/16" - 20 NF	4	H3	310321	313321	316321
1/2" - 13 NC	4	H3	310322	313322	316322
1/2" - 20 NF	4	H3	310323	313323	316323
9/16" - 12 NC	4	H3	310325	313325	316325
9/16" - 18 NF	4	H3	310326	313326	316326
5/8" - 11 NC	4	H3	310327	313327	316327
5/8" - 18 NF	4	H3	310328	313328	316328
3/4" - 10 NC	4	H3	310331	313331	316331
3/4" - 16 NF	4	H3	310332	313332	316332
7/8" - 9 NC	4	H4	310433	313433	316433
7/8" - 14 NF	4	H4	310434	313434	316434
1" - 8 NC	4	H4	310435	313435	316435
1" - 12 NF	4	H4	310436	313436	316436
1" - 14 NS	4	H4	-	313437	316437
1-1/8" - 7 NC	4	H4	310438	313438	316438
1-1/8" - 12 NF	4	H4	310439	313439	316439
1-1/4" - 7 NC	4	H4	310440	313440	316440
1-1/4" - 12 NF	6	H4	310441	313441	316441
1-3/8" - 6 NC	4	H4	310442	-	-
1-3/8" - 12 NF	6	H4	310443	-	-
1-1/2" - 6 NC	4	H4	310444	-	316444
1-1/2" - 12 NF	6	H4	-	313445	-

# HANSON® TAPS



359003

## High Speed Steel Ground Thread Taper Pipe Taps

- Cuts internal threads in pipes
- Nominal size of the tap is that of the pipe fitting being tapped
- Ideal for pipe fittings
- Tapered at a rate of 3/4" per foot

Description	No. of Flutes	Bulk Stock #
1/16" - 27 NPT	4	359010
1/8" - 27 NPT*	4	359001
1/4" - 18 NPT	4	359002
3/8" - 18 NPT	4	359003
1/2" - 14 NPT	4	359004
3/4" - 14 NPT	5	359005
1" - 11-1/2 NPT	5	359006

\*Taps with large shank (.437)



2120

## High Speed Steel Ground Thread Left Hand Fractional Plug Taps

- Left hand taps cut threads with a left hand rotation
- Used in applications where left hand studs or fasteners are required

Description	No. of Flutes	Pitch Diameter Limits	Bulk Stock #
1/4" - 20 NC	4	H3	2120
1/4" - 28 NF	4	H3	2123
5/16" - 18 NC	4	H3	2127
5/16" - 24 NF	4	H3	2129
3/8" - 16 NC	4	H3	2134
3/8" - 24 NF	4	H3	2136
7/16" - 14 NC	4	H3	2139
7/16" - 20 NF	4	H3	2140
1/2" - 13 NC	4	H3	2144
1/2" - 20 NF	4	H3	2145
9/16" - 12 NC	4	H3	2148
9/16" - 18 NF	4	H3	2149
5/8" - 11 NC	4	H3	2152
5/8" - 18 NF	4	H3	2154
3/4" - 10 NC	4	H3	2158
3/4" - 16 NF	4	H3	2160



# HANSON® TAPS

## High Speed Steel Ground Thread Spiral Point\* (Gun Taps) Chip Driver Machine Screw/Fractional Taps

- Engineered specifically for tapping of “through” holes
- Designed to .0005-inches pitch tolerance
- Commonly referred to as gun taps
- Cuts with a shearing action that shoots the chips ahead of the tap, producing a cleaner thread
- Recommended for production use in machine tools
- Ideal for thin materials



323325

Description	No. of Flutes	Pitch Diameter Limits	Bulk Stock #
6 - 32 NC	2	H3	323315
8 - 32 NC	2	H3	323319
10 - 24 NC	2	H3	323322
10 - 32 NF	2	H3	323323
12 - 24 NC	2	H3	323325
14 - 20 NS	2	H3	323328
1/4" - 20 NC	3	H3	333310
1/4" - 28 NF	2	H3	333312
5/16" - 18 NC	2	H3	333315
3/8" - 16 NC	3	H3	333318
7/16" - 14 NC	3	H3	333320
7/16" - 20 NF	3	H3	333321
1/2" - 13 NC	3	H3	333322
1/2" - 20 NF	3	H3	333323
9/16" - 12 NC	3	H3	333325
9/16" - 18 NF	3	H3	333326
5/8" - 11 NC	3	H3	333327
5/8" - 18 NF	3	H3	333328
3/4" - 10 NC	3	H3	333331
3/4" - 16 NF	3	H3	333332

\*Spiral Point taps should only be used on “through” hole applications

## High Speed Steel Plug Tap Index Sets



34403

- Convenient plastic pouch puts all the necessary taps at your finger tips

Description	Contents				Pouched Stock #
19 pc Set	Machine Screw Set - NC and NF HSS Ground Thread				34403
	<u>Thread Size</u>	<u>Tap Stock #</u>	<u>Thread Size</u>	<u>Tap Stock #</u>	
	0 - 80 NF	303101	5 - 44 NF	303214	
	1 - 64 NC	303102	6 - 32 NC	303315	
	1 - 72 NC	303103	6 - 40 NF	303216	
	2 - 56 NC	303205	8 - 32 NC	303319	
	2 - 64 NF	303206	8 - 36 NF	303220	
	3 - 48 NC	303207	10 - 24 NC	303322	
	3 - 56 NF	303208	10 - 32 NF	303323	
	4 - 40 NC	303209	12 - 24 NC	303325	
	4 - 48 NF	303212	12 - 28 NF	303326	
	5 - 40 NC	303213			
Empty Plastic Case for 34403					34403MT
10 pc Set	Fractional Set - NC and NF HSS Ground Thread				38413
	<u>Thread Size</u>	<u>Tap Stock #</u>	<u>Thread Size</u>	<u>Tap Stock #</u>	
	1/4" - 20 NC	313310	3/8" - 24 NF	313319	
	1/4" - 28 NF	313312	7/16" - 14 NC	313320	
	5/16" - 18 NC	313315	7/16" - 20 NF	313321	
	5/16" - 24 NF	313316	1/2" - 13 NC	313322	
	3/8" - 16 NC	313318	1/2" - 20 NF	313323	
Empty Plastic Case for 38413					38413MT
10 pc Set	Fractional Set - NC and NF HSS Cut Thread				48413
	<u>Thread Size</u>	<u>Tap Stock #</u>	<u>Thread Size</u>	<u>Tap Stock #</u>	
	1/4" - 20 NC	413010	3/8" - 24 NF	413019	
	1/4" - 28 NF	413012	7/16" - 14 NC	413020	
	5/16" - 18 NC	413015	7/16" - 20 NF	413021	
	5/16" - 24 NF	413016	1/2" - 13 NC	413022	
	3/8" - 16 NC	413018	1/2" - 20 NF	413023	

# HANSON® DIES

## Variety of Configurations

- Dies are available in solid hexagon, solid round and adjustable round

## Advanced Die Geometry

- Allows for faster cutting with longer life
- All HANSON® taps and dies are made in USA



## Material Types

- High Carbon Steel for cutting of external threads by hand
- High Speed Steel for longer life

## Etched

- Die size is etched on each tool for easy identification

## DIE STYLES



Hexagon Die

### Hexagon Dies

5/8", 1", 1-7/16" and 1-13/16" Across Hex Flats

- Best suited to maintenance and repair work
- Recommended for use with hexagon die stock
- In areas with limited space, die can be used with a wrench or socket



Adjustable Round Die

### Adjustable Round Dies

13/16", 1", 1-1/2", 2", 2-1/2" and 3" O.D.

- Ideal for precision threading with the adjustment of die made by set screw
- Adjustable dies allow the user to under or over cut their threads
- Fits into adjustable guide or plain die stock



Solid Round Die

### Solid Round Dies

1" and 1-1/2" O.D.

- Fits into adjustable guide or plain die stock
- Ideal for general purpose threading



Re-threading Hexagon Die

### Re-threading Hexagon Dies

19/32" through 2-9/16"

- Extra thick to aid in restoring jammed or rusted threads
- Will not undercut good threads
- Best suited for maintenance work in the shop or field
- Ideal for repairing damaged threads
- Recommended for use with hexagon die stock
- In areas with limited space, die can be used with a wrench or socket

## High Carbon Steel Hexagon Dies Machine Screw and Fractional

### Thread Type

- The specification of a Die is indicated by two numbers and two or three letters. The first number represents the diameter of the screw or bolt, the second number is the number of threads per inch. Eg. A 1/4-20 NC tap is 1/4 inch in outside diameter and is cut 20 threads per inch. The letters indicate the thread type.

Symbol	Meaning	Used on
NC (USS)	National Coarse	General purpose machines and appliances
NF (SAE)	National Fine	Automotive parts requiring extreme pressures
NS	National Special	Special threads - either diameter or threads per inch
NEF	National Extra Fine	For optical or thin wall parts
NPT	National Pipe Taper	For all pipe threads
BSP	British Standard Pipe	For all pipe threads



6132



6432



6844



8461

Description	5/8" Across Flat Bulk Stock #	1" Across Flat Carded Stock #	1" Across Flat Bulk Stock #	1-7/16" Across Flat Bulk Stock #	1-13/16" Across Flat Bulk Stock #
4 - 36 NS	6111	9311	6411	-	-
4 - 40 NC	6112	9312	6412	-	-
5 - 40 NC	6116	-	6416	-	-
6 - 32 NC	6118	9318	6418	-	-
8 - 32 NC	6124	9324	6424	-	-
10 - 24 NC	6128	9328	6428	-	-
10 - 32 NF	6131	9331	6431	-	-
12 - 24 NC	6132	9332	6432	-	-
14 - 20 NS	6135	9335	6435	-	-
3/16" - 24 NS	6212	-	6512	-	-
3/16" - 32 NS	6213	-	-	-	-
1/4" - 20 NC	6220	9420	6520	-	-
1/4" - 28 NF	-	9423	6523	-	-
5/16" - 18 NC	-	9427	6527	-	-
5/16" - 24 NF	-	9429	6529	-	-
3/8" - 16 NC	-	9434	6534	-	-
3/8" - 24 NF	-	9436	6536	-	-
7/16" - 14 NC	-	9439	6539	-	-
7/16" - 20 NF	-	9440	6540	-	-
1/2" - 13 NC	-	9444	6544	6844	-
1/2" - 20 NF	-	9445	6545	6845	-
9/16" - 12 NC	-	-	-	6848	-
9/16" - 18 NF	-	-	-	6849	-
5/8" - 11 NC	-	-	-	6852	-
5/8" - 18 NF	-	-	-	6854	-
3/4" - 10 NC	-	-	-	6858	-
3/4" - 16 NF	-	-	-	6860	-
7/8" - 9 NC	-	-	-	-	8461
7/8" - 14 NF	-	-	-	-	8463
1" - 8 NC	-	-	-	-	8465
1" - 14 NS	-	-	-	-	8467

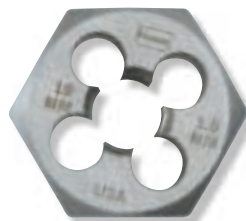
# HANSON® DIES

## High Carbon Steel Hexagon Metric Dies

- Ideal for automotive repair and machinery where metric threads are specified



6327



6638



8569

Description	5/8" Across Flat Bulk Stock #	1" Across Flat Carded Stock #	1" Across Flat Bulk Stock #	1-7/16" Across Flat Bulk Stock #	1-13/16" Across Flat Bulk Stock #
3 mm - 0.50	6312	9712	6612	-	-
3 mm - 0.60	6313	-	6613	-	-
4 mm - 0.70	6317	9717	6617	-	-
4 mm - 0.75	6318	9718	6618	-	-
5 mm - 0.80	6322	9722	6622	-	-
5 mm - 0.90	6323	9723	6623	-	-
6 mm - 1.00	6327	9727	6627	-	-
6.3 mm - 1.00	-	-	6629	-	-
7 mm - 1.00	-	9731	6631	-	-
8 mm - 1.20	-	9733	6633	-	-
8 mm - 1.25	-	9734	6634	-	-
9 mm - 0.75	-	9735	6635	-	-
9 mm - 1.00	-	9736	6636	-	-
9 mm - 1.25	-	9737	6637	-	-
10 mm - 1.00	-	9738	6638	-	-
10 mm - 1.25	-	9739	6639	-	-
10 mm - 1.50	-	9740	6640	-	-
11 mm - 1.50	-	9741	6641	-	-
12 mm - 1.25	-	9742	6642	-	-
12 mm - 1.50	-	9743	6643	-	-
12 mm - 1.75	-	9744	6644	-	-
14 mm - 1.25	-	-	-	6949	-
14 mm - 1.50	-	-	-	6950	-
14 mm - 2.00	-	-	-	6952	-
16 mm - 1.00	-	-	-	6954	-
16 mm - 1.50	-	-	-	6955	-
16 mm - 2.00	-	-	-	6956	-
18 mm - 1.50	-	-	-	6959	-
18 mm - 2.50	-	-	-	6961	-
20 mm - 2.50	-	-	-	-	8564
22 mm - 1.50	-	-	-	-	8565
24 mm - 2.00	-	-	-	-	8568
24 mm - 3.00	-	-	-	-	8569

## High Carbon Steel Hexagon Taper Pipe Dies



6703

Description	1" Across Flat Carded Stock #	1" Across Flat Bulk Stock #	1-7/16" Across Flat Bulk Stock #
1/8" - 27 NPT	9502	6702	7002
1/4" - 18 NPT	9503	6703	7003
3/8" - 18 NPT	-	-	7004
1/2" - 14 NPT	-	-	7005
1/8" - 28 BSP	-	6711	-
1/4" - 19 BSP	-	6712	-

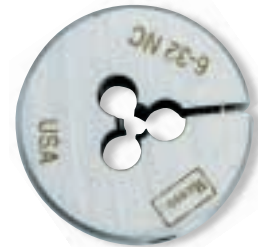


## High Carbon Steel Round Machine Screw Dies

Description	13/16" O.D. Screw Adj. Bulk Stock #	1" O.D. Screw Adj. Bulk Stock #	1" O.D. Solid Bulk Stock #
0 - 80 NF	3502	-	-
1 - 64 NC	3504	-	-
1 - 72 NF	3505	-	-
2 - 56 NC	3506	-	-
2 - 64 NF	3507	-	-
3 - 48 NC	3508	-	-
3 - 56 NF	3509	-	-
4 - 36 NS	3511	3711	3011
4 - 40 NC	3512	3712	3012
4 - 48 NF	3513	3713	-
5 - 40 NC	3516	3716	3016
5 - 44 NF	3517	3717	-
6 - 32 NC	3518	3718	3018
6 - 36 NS	3519	3719	-
6 - 40 NF	3520	3720	-
6 - 48 NS	3521	3721	-
8 - 32 NC	3524	3724	3024
8 - 36 NF	3525	3725	-
8 - 40 NS	3526	3726	-
10 - 24 NC	3528	3728	3028
10 - 32 NF	3531	3731	3031
12 - 24 NC	3532	3732	3032
12 - 28 NF	3533	3733	-
12 - 32 NEF	3534	-	-
14 - 20 NS	3535	3735	3035
14 - 24 NS	3536	-	-



3518



3718



3032

## High Carbon Steel Round Fractional Dies

Description	13/16" O.D. Screw Adj. Bulk Stock #	1" O.D. Screw Adj. Bulk Stock #	1" O.D. Solid Bulk Stock #
1/8" - 40 NS	3606	3806	-
3/16" - 24 NS	3612	3812	3112
3/16" - 32 NS	3613	3813	3113
3/16" - 36 NS	3615	-	-
1/4" - 20 NC	3620	3820	3120
1/4" - 24 NS	3621	3821	-
1/4" - 28 NF	3623	3823	3123
1/4" - 32 NEF	-	3824	-
1/4" - 40 NS	3625	3825	-
5/16" - 18 NC	3627	3827	3127
5/16" - 24 NF	3629	3829	3129
5/16" - 32 NEF	3631	3831	-
3/8" - 16 NC	-	3834	3134
3/8" - 24 NF	-	3836	3136
7/16" - 14 NC	-	3839	3139
7/16" - 20 NF	-	3840	3140
1/2" - 13 NC	-	3844	3144
1/2" - 20 NF	-	3845	3145
1/2" - 24 NS	-	3846	3146



3620



3820



3120

# HANSON® DIES

## High Carbon Steel Adjustable Round Fractional Dies Right and Left Hand

- Left hand dies cut threads with a left hand rotation



4020



4220



4444



4665



7520



7652

Description	1-1/2" O.D. Bulk Stock #	2" O.D. Bulk Stock #	2-1/2" O.D. Bulk Stock #	3" O.D. Bulk Stock #	Left-Hand 1" O.D. Bulk Stock #	Left-Hand 1-1/2" O.D. Bulk Stock #
1/4" - 20 NC	4020	4220	-	-	7520	-
1/4" - 28 NF	4023	4223	-	-	7523	-
5/16" - 18 NC	4027	4227	-	-	7527	-
5/16" - 24 NF	4029	4229	-	-	7529	-
3/8" - 16 NC	4034	4234	-	-	7534	-
3/8" - 24 NF	4036	4236	-	-	7536	-
7/16" - 14 NC	4039	4239	4439	-	7539	-
7/16" - 20 NF	4040	4240	-	-	7540	-
1/2" - 13 NC	4044	4244	4444	-	7544	-
1/2" - 20 NF	4045	4245	4445	-	7545	-
1/2" - 24 NS	-	-	-	-	7546	-
9/16" - 12 NC	4048	4248	4448	-	-	7648
9/16" - 18 NF	4049	4249	4449	-	-	7649
5/8" - 11 NC	4052	4252	4452	-	-	7652
5/8" - 18 NF	4054	4254	4454	-	-	7654
11/16" - 11 NS	4056	4256	-	-	-	-
11/16" - 16 NS	4057	4257	-	-	-	-
3/4" - 10 NC	4058	4258	4458	-	-	7658
3/4" - 16 NF	4060	4260	4460	-	-	7660
7/8" - 9 NC	-	4261	4461	-	-	-
7/8" - 14 NF	-	4263	4463	-	-	-
1" - 8 NC	-	4265	4465	4665	-	-
1" - 12 NF	-	4266	4466	4666	-	-
1" - 14 NS	-	4267	4467	4667	-	-
1-1/8" - 7 NC	-	-	-	4668	-	-
1-1/8" - 12 NF	-	-	-	4669	-	-
1-1/4" - 7 NC	-	-	-	4670	-	-
1-1/4" - 12 NF	-	-	-	4671	-	-
1-3/8" - 6 NC	-	-	-	4672	-	-
1-3/8" - 12 NF	-	-	-	4673	-	-
1-1/2" - 6 NC	-	-	-	4674	-	-
1-1/2" - 12 NF	-	-	-	4675	-	-

## High Carbon Steel Round Pipe Dies



4305

Description	1" O.D. Solid Round Bulk Stock #	1-1/2" O.D. Solid Round Bulk Stock #	1-1/2" O.D. Screw Adj. Bulk Stock #	2" O.D. Screw Adj. Bulk Stock #
1/8" - 27 NPT	3202	4102	5102	—
1/4" - 18 NPT	3203	4103	5103	—
3/8" - 18 NPT	—	4104	5104	—
1/2" - 14 NPT	—	4105	5105	4305
3/4" - 14 NPT	—	—	—	4306

# HANSON® DIES

## High Speed Steel Adjustable Round Dies Machine Screw and Fractional



501024



502024



503038



504053

Description	13/16 O.D. Bulk Stock #	1" O.D. Bulk Stock #	1-1/2" O.D. Bulk Stock #	2" O.D. Bulk Stock #
4 - 40 NC	501009	502009	-	-
4 - 48 NF	501010	-	-	-
5 - 40 NC	501012	-	-	-
5 - 44 NF	501013	-	-	-
6 - 32 NC	501014	502014	-	-
6 - 40 NF	501015	502015	-	-
8 - 32 NC	501018	502018	-	-
8 - 36 NF	501019	502019	-	-
10 - 24 NC	501021	502021	-	-
10 - 32 NF	501022	502022	-	-
12 - 24 NC	501024	502024	-	-
12 - 28 NF	501025	502025	-	-
1/4" - 20 NC	501038	502038	503038	-
1/4" - 28 NF	501039	502039	503039	-
5/16" - 18 NC	501041	502041	503041	-
5/16" - 24 NF	501042	502042	503042	-
3/8" - 16 NC	-	502044	503044	-
3/8" - 24 NF	-	502045	503045	-
7/16" - 14 NC	-	502046	503046	-
7/16" - 20 NF	-	502047	503047	-
1/2" - 13 NC	-	502048	503048	-
1/2" - 20 NF	-	502049	503049	-
9/16" - 12 NC	-	-	503051	-
9/16" - 18 NF	-	-	503052	-
5/8" - 11 NC	-	-	503053	504053
5/8" - 18 NF	-	-	503054	504054
3/4" - 10 NC	-	-	503057	504057
3/4" - 16 NF	-	-	503058	504058
7/8" - 9 NC	-	-	-	504059
7/8" - 14 NF	-	-	-	504060
1" - 8 NC	-	-	-	504061
1" - 12 NF	-	-	-	504062
1" - 14 NS	-	-	-	504063

## High Speed Steel Adjustable Round Taper Pipe Dies



502101

Description	1" O.D. Bulk Stock #	1-1/2" O.D. Bulk Stock #
1/8" - 27 NPT	502101	503101
1/4" - 18 NPT	-	503102

# HANSON® DIES



7220



7720

## High Carbon Steel Re-threading Hexagon Fractional Dies Right and Left Hand

- Designed for repairing damaged bolts and studs

Description	Width Across Hex Flats	Thickness of Hex Die	Right-Hand Bulk Stock #	Left-Hand Bulk Stock #
1/4" - 20 NC	19/32"	1/4"	7220	7720
1/4" - 28 NF	19/32"	1/4"	7223	7723
5/16" - 18 NC	11/16"	5/16"	7227	7727
5/16" - 24 NF	11/16"	5/16"	7229	7729
3/8" - 16 NC	25/32"	3/8"	7234	7734
3/8" - 24 NF	25/32"	3/8"	7236	7736
7/16" - 14 NC	7/8"	7/16"	7239	7739
7/16" - 20 NF	7/8"	7/16"	7240	7740
1/2" - 13 NC	1-1/16"	1/2"	7244	7744
1/2" - 20 NF	1-1/16"	1/2"	7245	7745
9/16" - 12 NC	1-1/16"	1/2"	7248	7748
9/16" - 18 NF	1-1/16"	1/2"	7249	7749
5/8" - 11 NC	1-1/4"	5/8"	7252	7752
5/8" - 18 NF	1-1/4"	5/8"	7254	7754
11/16" - 11 NS	1-7/16"	3/4"	7256	7756
11/16" - 16 NS	1-7/16"	3/4"	7257	7757
3/4" - 10 NC	1-7/16"	3/4"	7258	7758
3/4" - 16 NF	1-7/16"	3/4"	7260	7760
7/8" - 9 NC	1-5/8"	7/8"	7261	7761
7/8" - 14 NF	1-5/8"	7/8"	7263	7763
1" - 8 NC	1-13/16"	1"	7265	7765
1" - 12 NF	1-13/16"	1"	7266	7766
1" - 14 NS	1-13/16"	1"	7267	7767
1-1/8" - 7 NC	2"	1"	7268	-
1-1/8" - 12 NF	2"	1"	7269	-
1-1/4" - 7 NC	2-3/16"	1"	7270	-
1-1/4" - 12 NF	2-3/16"	1"	7271	-
1-3/8" - 6 NC	2-3/8"	1"	7272	-
1-3/8" - 12 NF	2-3/8"	1"	7273	-
1-1/2" - 6 NC	2-9/16"	1"	7274	-
1-1/2" - 12 NF	2-9/16"	1"	7275	-



# HANSON® DIES

## High Carbon Steel Re-threading Hexagon Metric Dies Right and Left Hand



7349



7855

Description	Right-Hand Bulk Stock #	Left-Hand Bulk Stock #
14.0 mm - 1.25	7349	–
14.0 mm - 1.50	7350	–
14.0 mm - 2.00	7352	–
16.0 mm - 1.50	7355	7855
16.0 mm - 2.00	7356	–
18.0 mm - 1.00	7358	7858
18.0 mm - 1.50	7359	7859
18.0 mm - 2.50	7361	–
20.0 mm - 2.50	7364	–
22.0 mm - 1.50	7365	7865
24.0 mm - 1.50	7367	–
30.0 mm - 1.50	7373	–

## High Carbon Steel Re-threading Hexagon Taper Pipe Dies



7403

Description	Bulk Stock #
1/8" - 27 NPT	7402
1/4" - 18 NPT	7403
3/8" - 18 NPT	7404
1/2" - 14 NPT	7405
3/4" - 14 NPT	7406
1" - 11-1/2 NPT	7407

## High Carbon Steel Re-threading Hexagon Fractional Die Set

- Wooden storage case



24839

Description	Contents	Stock #																																		
16 pc Set	Hex Re-threading Die Set - NC and NF	24839																																		
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1/4" - 20 NC</td><td>7220</td></tr><tr><td>1/4" - 28 NF</td><td>7223</td></tr><tr><td>5/16" - 18 NC</td><td>7227</td></tr><tr><td>5/16" - 24 NF</td><td>7229</td></tr><tr><td>3/8" - 16 NC</td><td>7234</td></tr><tr><td>3/8" - 24 NF</td><td>7236</td></tr><tr><td>7/16" - 14 NC</td><td>7239</td></tr><tr><td>7/16" - 20 NF</td><td>7240</td></tr><tr><td>1/2" - 13 NC</td><td>7244</td></tr><tr><td>1/2" - 20 NF</td><td>7245</td></tr><tr><td>9/16" - 12 NC</td><td>7248</td></tr><tr><td>9/16" - 18 NF</td><td>7249</td></tr><tr><td>5/8" - 11 NC</td><td>7252</td></tr><tr><td>5/8" - 18 NF</td><td>7254</td></tr><tr><td>3/4" - 10 NC</td><td>7258</td></tr><tr><td>3/4" - 16 NF</td><td>7260</td></tr></table>	Die Size	Stock #	1/4" - 20 NC	7220	1/4" - 28 NF	7223	5/16" - 18 NC	7227	5/16" - 24 NF	7229	3/8" - 16 NC	7234	3/8" - 24 NF	7236	7/16" - 14 NC	7239	7/16" - 20 NF	7240	1/2" - 13 NC	7244	1/2" - 20 NF	7245	9/16" - 12 NC	7248	9/16" - 18 NF	7249	5/8" - 11 NC	7252	5/8" - 18 NF	7254	3/4" - 10 NC	7258	3/4" - 16 NF	7260	
Die Size	Stock #																																			
1/4" - 20 NC	7220																																			
1/4" - 28 NF	7223																																			
5/16" - 18 NC	7227																																			
5/16" - 24 NF	7229																																			
3/8" - 16 NC	7234																																			
3/8" - 24 NF	7236																																			
7/16" - 14 NC	7239																																			
7/16" - 20 NF	7240																																			
1/2" - 13 NC	7244																																			
1/2" - 20 NF	7245																																			
9/16" - 12 NC	7248																																			
9/16" - 18 NF	7249																																			
5/8" - 11 NC	7252																																			
5/8" - 18 NF	7254																																			
3/4" - 10 NC	7258																																			
3/4" - 16 NF	7260																																			

## High Carbon Steel Re-threading Hexagon Fractional Die Sets

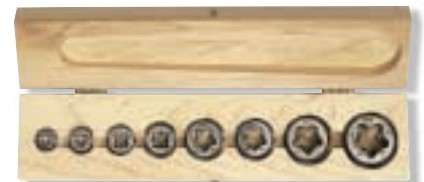
Description	Contents	Stock #																						
10 pc Set	Hex Re-threading Die Set - NC	25701																						
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1/4" - 20 NC</td><td>7220</td></tr><tr><td>5/16" - 18 NC</td><td>7227</td></tr><tr><td>3/8" - 16 NC</td><td>7234</td></tr><tr><td>7/16" - 14 NC</td><td>7239</td></tr><tr><td>1/2" - 13 NC</td><td>7244</td></tr><tr><td>9/16" - 12 NC</td><td>7248</td></tr><tr><td>5/8" - 11 NC</td><td>7252</td></tr><tr><td>3/4" - 10 NC</td><td>7258</td></tr><tr><td>7/8" - 9 NC</td><td>7261</td></tr><tr><td>1" - 8 NC</td><td>7265</td></tr></table>	Die Size	Stock #	1/4" - 20 NC	7220	5/16" - 18 NC	7227	3/8" - 16 NC	7234	7/16" - 14 NC	7239	1/2" - 13 NC	7244	9/16" - 12 NC	7248	5/8" - 11 NC	7252	3/4" - 10 NC	7258	7/8" - 9 NC	7261	1" - 8 NC	7265	
Die Size	Stock #																							
1/4" - 20 NC	7220																							
5/16" - 18 NC	7227																							
3/8" - 16 NC	7234																							
7/16" - 14 NC	7239																							
1/2" - 13 NC	7244																							
9/16" - 12 NC	7248																							
5/8" - 11 NC	7252																							
3/4" - 10 NC	7258																							
7/8" - 9 NC	7261																							
1" - 8 NC	7265																							
Empty Wooden Case for 25701		25701MT																						
10 pc Set	Hex Re-threading Die Set - NF	24801																						
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1/4" - 28 NF</td><td>7223</td></tr><tr><td>5/16" - 24 NF</td><td>7229</td></tr><tr><td>3/8" - 24 NF</td><td>7236</td></tr><tr><td>7/16" - 20 NF</td><td>7240</td></tr><tr><td>1/2" - 20 NF</td><td>7245</td></tr><tr><td>9/16" - 18 NF</td><td>7249</td></tr><tr><td>5/8" - 18 NF</td><td>7252</td></tr><tr><td>3/4" - 16 NF</td><td>7260</td></tr><tr><td>7/8" - 14 NF</td><td>7263</td></tr><tr><td>1" - 12 NF</td><td>7266</td></tr></table>	Die Size	Stock #	1/4" - 28 NF	7223	5/16" - 24 NF	7229	3/8" - 24 NF	7236	7/16" - 20 NF	7240	1/2" - 20 NF	7245	9/16" - 18 NF	7249	5/8" - 18 NF	7252	3/4" - 16 NF	7260	7/8" - 14 NF	7263	1" - 12 NF	7266	
Die Size	Stock #																							
1/4" - 28 NF	7223																							
5/16" - 24 NF	7229																							
3/8" - 24 NF	7236																							
7/16" - 20 NF	7240																							
1/2" - 20 NF	7245																							
9/16" - 18 NF	7249																							
5/8" - 18 NF	7252																							
3/4" - 16 NF	7260																							
7/8" - 14 NF	7263																							
1" - 12 NF	7266																							
Empty Wooden Case for 24801		24801MT																						
10 pc Set	Hex Re-threading Die Set - NC and NF	24815																						
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1/4" - 20 NC</td><td>7220</td></tr><tr><td>1/4" - 28 NF</td><td>7223</td></tr><tr><td>5/16" - 18 NC</td><td>7227</td></tr><tr><td>5/16" - 24 NF</td><td>7229</td></tr><tr><td>3/8" - 16 NC</td><td>7234</td></tr><tr><td>3/8" - 24 NF</td><td>7236</td></tr><tr><td>7/16" - 14 NC</td><td>7239</td></tr><tr><td>7/16" - 20 NF</td><td>7240</td></tr><tr><td>1/2" - 13 NC</td><td>7244</td></tr><tr><td>1/2" - 20 NF</td><td>7245</td></tr></table>	Die Size	Stock #	1/4" - 20 NC	7220	1/4" - 28 NF	7223	5/16" - 18 NC	7227	5/16" - 24 NF	7229	3/8" - 16 NC	7234	3/8" - 24 NF	7236	7/16" - 14 NC	7239	7/16" - 20 NF	7240	1/2" - 13 NC	7244	1/2" - 20 NF	7245	
Die Size	Stock #																							
1/4" - 20 NC	7220																							
1/4" - 28 NF	7223																							
5/16" - 18 NC	7227																							
5/16" - 24 NF	7229																							
3/8" - 16 NC	7234																							
3/8" - 24 NF	7236																							
7/16" - 14 NC	7239																							
7/16" - 20 NF	7240																							
1/2" - 13 NC	7244																							
1/2" - 20 NF	7245																							
Empty Wooden Case for 24815		24815MT																						
8 pc Set	Hex Re-threading Die Set - NC	25734																						
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1/4" - 20 NC</td><td>7220</td></tr><tr><td>5/16" - 18 NC</td><td>7227</td></tr><tr><td>3/8" - 16 NC</td><td>7234</td></tr><tr><td>7/16" - 14 NC</td><td>7239</td></tr><tr><td>1/2" - 13 NC</td><td>7244</td></tr><tr><td>9/16" - 12 NC</td><td>7248</td></tr><tr><td>5/8" - 11 NC</td><td>7252</td></tr><tr><td>3/4" - 10 NC</td><td>7258</td></tr></table>	Die Size	Stock #	1/4" - 20 NC	7220	5/16" - 18 NC	7227	3/8" - 16 NC	7234	7/16" - 14 NC	7239	1/2" - 13 NC	7244	9/16" - 12 NC	7248	5/8" - 11 NC	7252	3/4" - 10 NC	7258					
Die Size	Stock #																							
1/4" - 20 NC	7220																							
5/16" - 18 NC	7227																							
3/8" - 16 NC	7234																							
7/16" - 14 NC	7239																							
1/2" - 13 NC	7244																							
9/16" - 12 NC	7248																							
5/8" - 11 NC	7252																							
3/4" - 10 NC	7258																							
Empty Wooden Case for 25734		25734MT																						

- Wooden storage case



25701

- Wooden storage case



25734

# HANSON® DIES

## High Carbon Steel Re-threading Hexagon Fractional Die Sets

- Wooden storage case



24834



24812

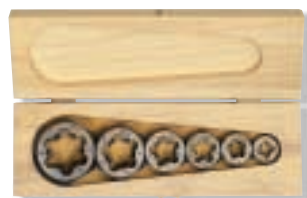


1925

Description	Contents	Stock #																		
8 pc Set	Hex Re-threading Die Set - NF	24834																		
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1/4" - 28 NF</td><td>7223</td></tr><tr><td>5/16" - 24 NF</td><td>7229</td></tr><tr><td>3/8" - 24 NF</td><td>7236</td></tr><tr><td>7/16" - 20 NF</td><td>7240</td></tr><tr><td>1/2" - 20 NF</td><td>7245</td></tr><tr><td>9/16" - 18 NF</td><td>7249</td></tr><tr><td>5/8" - 18 NF</td><td>7254</td></tr><tr><td>3/4" - 16 NF</td><td>7260</td></tr></table>	Die Size	Stock #	1/4" - 28 NF	7223	5/16" - 24 NF	7229	3/8" - 24 NF	7236	7/16" - 20 NF	7240	1/2" - 20 NF	7245	9/16" - 18 NF	7249	5/8" - 18 NF	7254	3/4" - 16 NF	7260	
Die Size	Stock #																			
1/4" - 28 NF	7223																			
5/16" - 24 NF	7229																			
3/8" - 24 NF	7236																			
7/16" - 20 NF	7240																			
1/2" - 20 NF	7245																			
9/16" - 18 NF	7249																			
5/8" - 18 NF	7254																			
3/4" - 16 NF	7260																			
Empty Wooden Case for 24834		24834MT																		
5 pc Set	Hex Re-threading Die Set - NC	25712																		
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1/4" - 20 NC</td><td>7220</td></tr><tr><td>5/16" - 18 NC</td><td>7227</td></tr><tr><td>3/8" - 16 NC</td><td>7234</td></tr><tr><td>7/16" - 14 NC</td><td>7239</td></tr><tr><td>1/2" - 13 NC</td><td>7244</td></tr></table>	Die Size	Stock #	1/4" - 20 NC	7220	5/16" - 18 NC	7227	3/8" - 16 NC	7234	7/16" - 14 NC	7239	1/2" - 13 NC	7244							
Die Size	Stock #																			
1/4" - 20 NC	7220																			
5/16" - 18 NC	7227																			
3/8" - 16 NC	7234																			
7/16" - 14 NC	7239																			
1/2" - 13 NC	7244																			
5 pc Set	Hex Re-threading Die Set - NF	24812																		
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1/4" - 28 NF</td><td>7223</td></tr><tr><td>5/16" - 24 NF</td><td>7229</td></tr><tr><td>3/8" - 24 NF</td><td>7236</td></tr><tr><td>7/16" - 20 NF</td><td>7240</td></tr><tr><td>1/2" - 20 NF</td><td>7245</td></tr></table>	Die Size	Stock #	1/4" - 28 NF	7223	5/16" - 24 NF	7229	3/8" - 24 NF	7236	7/16" - 20 NF	7240	1/2" - 20 NF	7245							
Die Size	Stock #																			
1/4" - 28 NF	7223																			
5/16" - 24 NF	7229																			
3/8" - 24 NF	7236																			
7/16" - 20 NF	7240																			
1/2" - 20 NF	7245																			
4 pc Set	Hex Re-threading Die Set - NC	1925																		
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1-1/8" - 7 NC</td><td>7268</td></tr><tr><td>1-1/4" - 7 NC</td><td>7270</td></tr><tr><td>1-3/8" - 6 NC</td><td>7272</td></tr><tr><td>1-1/2" - 6 NC</td><td>7274</td></tr></table>	Die Size	Stock #	1-1/8" - 7 NC	7268	1-1/4" - 7 NC	7270	1-3/8" - 6 NC	7272	1-1/2" - 6 NC	7274									
Die Size	Stock #																			
1-1/8" - 7 NC	7268																			
1-1/4" - 7 NC	7270																			
1-3/8" - 6 NC	7272																			
1-1/2" - 6 NC	7274																			
4 pc Set	Hex Re-threading Die Set - NF	1926																		
	<table><tr><th>Die Size</th><th>Stock #</th></tr><tr><td>1-1/8" - 12 NF</td><td>7269</td></tr><tr><td>1-1/4" - 12 NF</td><td>7271</td></tr><tr><td>1-3/8" - 12 NF</td><td>7273</td></tr><tr><td>1-1/2" - 12 NF</td><td>7275</td></tr></table>	Die Size	Stock #	1-1/8" - 12 NF	7269	1-1/4" - 12 NF	7271	1-3/8" - 12 NF	7273	1-1/2" - 12 NF	7275									
Die Size	Stock #																			
1-1/8" - 12 NF	7269																			
1-1/4" - 12 NF	7271																			
1-3/8" - 12 NF	7273																			
1-1/2" - 12 NF	7275																			

## High Carbon Steel Re-threading Hexagon Taper Pipe Die Set

- Wooden storage case



1922

Description	Contents	Stock #
6 pc Set	Hexagon Re-threading Die Set - NPT	1922
	<u>Die Size</u>	<u>Stock #</u>
	1/8" - 27 NPT	7402
	1/4" - 18 NPT	7403
	3/8" - 18 NPT	7404
	1/2" - 14 NPT	7405
	3/4" - 14 NPT	7406
	1" - 11-1/2 NPT	7407
Empty Wooden Case for 1922		1922 MT

# HANSON® TAP AND DIE SETS

## High Carbon Steel Tap and Re-threading Pipe Die Set

Description	Contents	Stock #
12 pc Set	Pipe Sizes 1/8" to 1"	1920
	Thread Size	Hexagon
	<u>Pipe</u>	<u>Tap Stock #</u> <u>Die Stock #</u>
	1/8" - 27 NPT	1902      7402
	1/4" - 18 NPT	1903      7403
	3/8" - 18 NPT	1904      7404
	1/2" - 14 NPT	1905      7405
	3/4" - 14 NPT	1906      7406
	1" - 11-1/2 NPT	1907      7407

Empty Wooden Case for 1920

1920 MT

- Wooden storage case



1920

## High Speed Steel Cut Thread Tap and High Carbon Steel Re-threading Pipe Die Set

Description	Contents	Stock #
12 pc Set	Pipe Sizes 1/8" to 1"	1923
	Thread Size	Hexagon
	<u>Pipe</u>	<u>Tap Stock #</u> <u>Die Stock #</u>
	1/8" - 27 NPT	459001      7402
	1/4" - 18 NPT	459002      7403
	3/8" - 18 NPT	459003      7404
	1/2" - 14 NPT	459004      7405
	3/4" - 14 NPT	459005      7406
	1" - 11-1/2 NPT	459006      7407

- Wooden storage case

# HANSON® THREADING TOOLS

## Plain Die Stocks



12416

- Solid construction for long life
- Dies easily lock in position with set screw

Description	Usage	Carded Stock #	Bulk Stock #
DS - 57	For 5/8" Hexagon Dies	–	12457
DS - 13	For 13/16" Round Dies	–	12416
DS - 9	For 1" Hexagon or Round Dies	12008	11008

## Adjustable Guide Die Stocks



12428

- Maintains alignment for accurate, straight threading
- Dies easily lock in position with set screw

Description	Usage	Carded Stock #	Bulk Stock #
DS - 28	For 1" Adjustable Round Dies	–	12428
DS - 35	For 1-1/2" Adjustable Round Dies	–	12435
DS - 45	For 2" Adjustable Round Dies	–	12445
DS - 25	For 1" Round Dies	12025	11025
DS - 26	For 1" Hexagon Dies	12026	11026
DS - 36	For 1-7/16" Hexagon Dies	–	12436
DS - 46	For 1-13/16" Hexagon Dies	–	12446
DS - 35/DS - 36	Replacement Handle	–	31103502



# HANSON® THREADING TOOLS

## Offset Handle Adjustable Tap and Reamer Wrenches



12421

Description	Usage	Carded Stock #	Bulk Stock #
TR - 21	For Taps No. 0 to 1/2" (3 mm to 12 mm)	12021	12421
TR - 121	For Taps No. 1/4" to 1" (6 mm to 24 mm)	–	11212

- Designed for use with taps, reamers, screw extractors and many other tools to be turned by hand
- Adjusted by evenly turning the two knurled tightening screws

## Adjustable Handle Tap and Reamer Wrenches



12498

Description	Usage	Carded Stock #	Bulk Stock #
TR - 88	For Taps No. 0 to 1/2" (3 mm to 12 mm)	12088	311088
TR - 98	For Taps 1/4" to 1" (6 mm to 24 mm)	–	12498

- Solid construction for long life and ease of use
- Straight handle design provides greater leverage, especially when using larger diameter taps
- Ideal for hand tapping

Taps, Dies and Screw Extractors

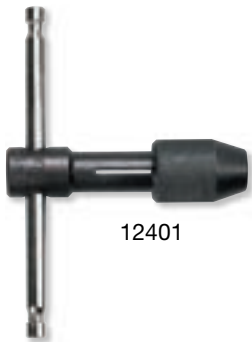
## Repair Parts for 12088 and 12498

Description	Stock #
Fixed Jaw for 12088	31108803
Screw for 12088	31108804
Adjustable Jaw for 12088	31108805
Fixed Jaw for 12498	31109804
Adjustable Jaw for 12498	31109805

# HANSON® THREADING TOOLS

## T-Handle Wrenches

- Designed for use with taps and on many other tools to be turned by hand
- Adjusted and tightened to size by twisting knurled nut
- Additional holding jaws are recessed inside hole for gripping onto smaller sized taps
- T-Handle may be extended full length in either direction for more leverage
- Ideal for hand tapping in difficult-to-reach areas

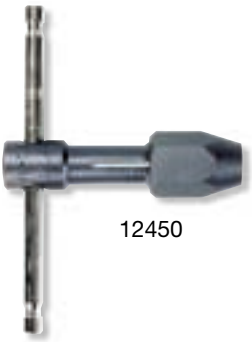


12401

Description	Usage	Carded Stock #	Bulk Stock #
TR - 1E	For Taps No. 0 to 1/4" (3 mm to 6 mm)	12001	12401
TR - 1-1/2E	For Taps No. 12 to 5/16"	12115	12415
TR - 2E	For Taps 1/4" to 1/2" (6 mm to 12 mm)	12002	12402

## Two-in-One Wrench

- End of TR-50 wrench has 3/8" square drive to accommodate socket wrench or extension when desired
- Hexagon nut for tightening tap square
- Additional holding jaws are recessed inside hole for gripping onto smaller sized taps
- Sliding T-handle has spring tension stop

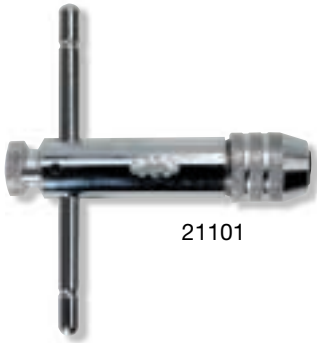


12450

Description	Usage	Carded Stock #	Bulk Stock #
TR - 50	For Taps 1/4" to 1/2" (6 mm to 12 mm)	12050	12450
TR - 73	For Taps No. 0 to 1/4" (3 mm to 6 mm)	12073	12473

## Hexagon Nut T-Handle Ratchet Tap Wrench

- Three position gear box allows quick and easy left and right hand tapping
- Knurled nut for tightening
- Ideal for hard-to-reach areas
- Made in Germany



21101

Description	Carded Stock #	Bulk Stock #
For Tap Sizes No. 0 to 1/4" (3 mm to 6 mm)	21201	21101
For Tap Sizes 1/4" to 1/2" (6 mm to 12 mm)	21202	21102

# HANSON® THREADING TOOLS

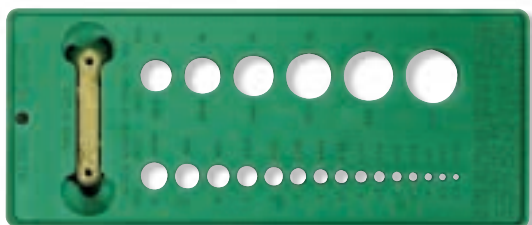


11016

Description	Carded Stock #	Bulk Stock #
16-Leaf Metric Thread Pitch Gauge	12016	11016
18-Leaf Standard Thread Pitch Gauge	12018	11018
16-Leaf Standard and Metric Thread Pitch Gauge	12017	11017

## Thread Pitch Gauges

- Standard thread pitch gauge measures the number of threads per inch
- Metric thread pitch gauge measures the distance between thread in millimeters
- Quality construction means long life and accurate readings



12087

Description	Stock #
Metric Measuring Kit	12087

## Metric Measuring Kit with Thread Gauges

- Shows 21 outside diameters (OD) in millimeters and decimals from 2.3 mm (.0906) to 24 mm (.9449)
- Measures thread pitch in millimeters from 0.35 to 3.00



11221

Description	Pouched Stock #	Carded Stock #	Bulk Stock #
Repair Reamer (1/8" to 1/2")	—	11214	—
Repair Reamer (1/2" to 1")	11221	—	—
Repair Reamer Set (11214 and 11221)	—	—	310340

## Reamers

- For deburring and enlarging holes in sheet metal or similar materials
- Removable handle with 3/8" square drive to use reamer with socket or adjustable handle tap wrench
- Made of finest quality tool steel
- Not for use in machine tools

# HANSON® TAP AND DIE SETS

## Fractional/Metric Tap, Die and Drill Bit Deluxe Set

Description	Contents	Stock #
-------------	----------	---------

117 pc Set      Combination Machine Screw, Fractional and Metric Taps and Dies,  
Screw Extractors and High Speed Steel Drill Bits

26377

- Plastic storage case



26377

Thread Size	Tap Stock #	Die Stock #	Drill Bit	Drill Bit
<u>Machine Screw</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>	<u>Size</u>	<u>Stock #</u>
4 - 40 NC	1112	6112	No. 3	80103
6 - 32 NC	1118	6118	No. 7	80107
8 - 32 NC	1124	6124	No. 9	80109
10 - 24 NC	1128	6128	No. 16	80116
10 - 32 NF	1131	6131	No. 19	80119
12 - 24 NC	1132	6132	No. 20	80120
<u>Fractional</u>		<u>1" Hexagon</u>	No. 21	80121
1/4" - 20 NC	1420	6520	No. 25	80125
1/4" - 28 NF	1423	6523	No. 29	80129
5/16" - 18 NC	1427	6527	No. 30	80130
5/16" - 24 NF	1429	6529	No. 36	80136
3/8" - 16 NC	1434	6534	No. 39	80139
3/8" - 24 NF	1436	6536	No. 43	80143
7/16" - 14 NC	1439	6539	Letter B	40102
7/16" - 20 NF	1440	6540	Letter F	40106
1/2" - 13 NC	1444	6544	Letter H	40108
1/2" - 20 NF	1445	6545	Letter I	40109
<u>Metric</u>		<u>5/8" Hexagon</u>	Letter J	40110
3 mm - 0.50	1712	6312	Letter O	40115
4 mm - 0.70	1717	6317	Letter Q	40117
4 mm - 0.75	1718	6318	Letter R	40118
5 mm - 0.80	1722	6322	Letter S	40119
5 mm - 0.90	1723	6323	Letter U	40121
6 mm - 1.00	1727	6327	Letter Z	40126
		<u>1" Hexagon</u>	5/64"	60105
7 mm - 1.00	1731	6631	7/64"	60107
8 mm - 1.00	1733	6633	5/32"	60110
8 mm - 1.25	1734	6634	1/4"	60116
9 mm - 1.00	1736	6636	19/64"	60119
9 mm - 1.25	1737	6637	5/16"	60120
10 mm - 1.25	1739	6639	21/64"	60121
10 mm - 1.50	1740	6640	3/8"	60124
11 mm - 1.50	1741	6641	25/64"	60125
12 mm - 1.50	1743	6643	13/32"	60126
12 mm - 1.75	1744	6644	27/64"	60127
<u>Pipe</u>			29/64"	60129
1/8" - 27 NPT	1902	6702	Spiral Flute	
1/8" - 28 BSP	1911	6711	<u>Screw Extractor</u>	
			EX - 1	52401
			EX - 2	52402
			EX - 3	52403
			EX - 4	52404
			EX - 5	52405

### Threading Tools

### Stock #

Adjustable Die Stock - 1" Hexagon Dies	11026
Plain Die Stock - 5/8" Hexagon Dies	12457
Adjustable Handle Tap Wrench - Taps No. 0 to 1/2"	311088
Two-in-One Tap Wrench - Taps 1/4" to 1/2"	12450
T-Handle Wrench - Taps No. 0 to 1/4"	12473
16 Leaf Metric Thread Pitch Gauge	11016
18 Leaf Standard Thread Pitch Gauge	11018
Screwdriver	

# HANSON® TAP AND DIE SETS

## Fractional/Metric Tap and Die Super Set

Description	Contents	Stock #																																																																																																																																																			
76 pc Set	Combination Machine Screw, Fractional and Metric	26376																																																																																																																																																			
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Machine Screw</u></td><td><u>Plug Style</u></td><td><u>5/8" Hexagon</u></td></tr> <tr> <td>4 - 40 NC</td><td>1112</td><td>6112</td></tr> <tr> <td>6 - 32 NC</td><td>1118</td><td>6118</td></tr> <tr> <td>8 - 32 NC</td><td>1124</td><td>6124</td></tr> <tr> <td>10 - 24 NC</td><td>1128</td><td>6128</td></tr> <tr> <td>10 - 32 NF</td><td>1131</td><td>6131</td></tr> <tr> <td>12 - 24 NC</td><td>1132</td><td>6132</td></tr> <tr> <td><u>Fractional</u></td><td></td><td><u>1" Hexagon</u></td></tr> <tr> <td>1/4" - 20 NC</td><td>1420</td><td>6520</td></tr> <tr> <td>1/4" - 28 NF</td><td>1423</td><td>6523</td></tr> <tr> <td>5/16" - 18 NC</td><td>1427</td><td>6527</td></tr> <tr> <td>5/16" - 24 NF</td><td>1429</td><td>6529</td></tr> <tr> <td>3/8" - 16 NC</td><td>1434</td><td>6534</td></tr> <tr> <td>3/8" - 24 NF</td><td>1436</td><td>6536</td></tr> <tr> <td>7/16" - 14 NC</td><td>1439</td><td>6539</td></tr> <tr> <td>7/16" - 20 NF</td><td>1440</td><td>6540</td></tr> <tr> <td>1/2" - 13 NC</td><td>1444</td><td>6544</td></tr> <tr> <td>1/2" - 20 NF</td><td>1445</td><td>6545</td></tr> <tr> <td><u>Metric</u></td><td></td><td><u>5/8" Hexagon</u></td></tr> <tr> <td>3 mm - 0.50</td><td>1712</td><td>6312</td></tr> <tr> <td>4 mm - 0.70</td><td>1717</td><td>6317</td></tr> <tr> <td>4 mm - 0.75</td><td>1718</td><td>6318</td></tr> <tr> <td>5 mm - 0.80</td><td>1722</td><td>6322</td></tr> <tr> <td>5 mm - 0.90</td><td>1723</td><td>6323</td></tr> <tr> <td>6 mm - 1.00</td><td>1727</td><td>6327</td></tr> <tr> <td></td><td></td><td><u>1" Hexagon</u></td></tr> <tr> <td>7 mm - 1.00</td><td>1731</td><td>6631</td></tr> <tr> <td>8 mm - 1.00</td><td>1733</td><td>6633</td></tr> <tr> <td>8 mm - 1.25</td><td>1734</td><td>6634</td></tr> <tr> <td>9 mm - 1.00</td><td>1736</td><td>6636</td></tr> <tr> <td>9 mm - 1.25</td><td>1737</td><td>6637</td></tr> <tr> <td>10 mm - 1.25</td><td>1739</td><td>6639</td></tr> <tr> <td>10 mm - 1.50</td><td>1740</td><td>6640</td></tr> <tr> <td>11 mm - 1.50</td><td>1741</td><td>6641</td></tr> <tr> <td>12 mm - 1.50</td><td>1743</td><td>6643</td></tr> <tr> <td>12 mm - 1.75</td><td>1744</td><td>6644</td></tr> <tr> <td><u>Pipe</u></td><td></td><td></td></tr> <tr> <td>1/8" - 27 NPT</td><td>1902</td><td>6702</td></tr> <tr> <td>1/8" - 28 BSP</td><td>1911</td><td>6711</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adj. Die Stock - 1" Hexagon Dies</td><td></td><td>11026</td></tr> <tr> <td>Plain Die Stock - 5/8" Hexagon Dies</td><td></td><td>12457</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps No. 0 to 1/2"</td><td></td><td>311088</td></tr> <tr> <td>Two-in-One Tap Wrench - Taps 1/4" to 1/2"</td><td></td><td>12450</td></tr> <tr> <td>T-Handle Wrench - Taps No. 0 to 1/4"</td><td></td><td>12473</td></tr> <tr> <td>16 Leaf Metric Thread Pitch Gauge</td><td></td><td>11016</td></tr> <tr> <td>18 Leaf Standard Thread Pitch Gauge</td><td></td><td>11018</td></tr> <tr> <td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Machine Screw</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>	4 - 40 NC	1112	6112	6 - 32 NC	1118	6118	8 - 32 NC	1124	6124	10 - 24 NC	1128	6128	10 - 32 NF	1131	6131	12 - 24 NC	1132	6132	<u>Fractional</u>		<u>1" Hexagon</u>	1/4" - 20 NC	1420	6520	1/4" - 28 NF	1423	6523	5/16" - 18 NC	1427	6527	5/16" - 24 NF	1429	6529	3/8" - 16 NC	1434	6534	3/8" - 24 NF	1436	6536	7/16" - 14 NC	1439	6539	7/16" - 20 NF	1440	6540	1/2" - 13 NC	1444	6544	1/2" - 20 NF	1445	6545	<u>Metric</u>		<u>5/8" Hexagon</u>	3 mm - 0.50	1712	6312	4 mm - 0.70	1717	6317	4 mm - 0.75	1718	6318	5 mm - 0.80	1722	6322	5 mm - 0.90	1723	6323	6 mm - 1.00	1727	6327			<u>1" Hexagon</u>	7 mm - 1.00	1731	6631	8 mm - 1.00	1733	6633	8 mm - 1.25	1734	6634	9 mm - 1.00	1736	6636	9 mm - 1.25	1737	6637	10 mm - 1.25	1739	6639	10 mm - 1.50	1740	6640	11 mm - 1.50	1741	6641	12 mm - 1.50	1743	6643	12 mm - 1.75	1744	6644	<u>Pipe</u>			1/8" - 27 NPT	1902	6702	1/8" - 28 BSP	1911	6711	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1" Hexagon Dies		11026	Plain Die Stock - 5/8" Hexagon Dies		12457	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450	T-Handle Wrench - Taps No. 0 to 1/4"		12473	16 Leaf Metric Thread Pitch Gauge		11016	18 Leaf Standard Thread Pitch Gauge		11018	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																																																																																																																			
<u>Machine Screw</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>																																																																																																																																																			
4 - 40 NC	1112	6112																																																																																																																																																			
6 - 32 NC	1118	6118																																																																																																																																																			
8 - 32 NC	1124	6124																																																																																																																																																			
10 - 24 NC	1128	6128																																																																																																																																																			
10 - 32 NF	1131	6131																																																																																																																																																			
12 - 24 NC	1132	6132																																																																																																																																																			
<u>Fractional</u>		<u>1" Hexagon</u>																																																																																																																																																			
1/4" - 20 NC	1420	6520																																																																																																																																																			
1/4" - 28 NF	1423	6523																																																																																																																																																			
5/16" - 18 NC	1427	6527																																																																																																																																																			
5/16" - 24 NF	1429	6529																																																																																																																																																			
3/8" - 16 NC	1434	6534																																																																																																																																																			
3/8" - 24 NF	1436	6536																																																																																																																																																			
7/16" - 14 NC	1439	6539																																																																																																																																																			
7/16" - 20 NF	1440	6540																																																																																																																																																			
1/2" - 13 NC	1444	6544																																																																																																																																																			
1/2" - 20 NF	1445	6545																																																																																																																																																			
<u>Metric</u>		<u>5/8" Hexagon</u>																																																																																																																																																			
3 mm - 0.50	1712	6312																																																																																																																																																			
4 mm - 0.70	1717	6317																																																																																																																																																			
4 mm - 0.75	1718	6318																																																																																																																																																			
5 mm - 0.80	1722	6322																																																																																																																																																			
5 mm - 0.90	1723	6323																																																																																																																																																			
6 mm - 1.00	1727	6327																																																																																																																																																			
		<u>1" Hexagon</u>																																																																																																																																																			
7 mm - 1.00	1731	6631																																																																																																																																																			
8 mm - 1.00	1733	6633																																																																																																																																																			
8 mm - 1.25	1734	6634																																																																																																																																																			
9 mm - 1.00	1736	6636																																																																																																																																																			
9 mm - 1.25	1737	6637																																																																																																																																																			
10 mm - 1.25	1739	6639																																																																																																																																																			
10 mm - 1.50	1740	6640																																																																																																																																																			
11 mm - 1.50	1741	6641																																																																																																																																																			
12 mm - 1.50	1743	6643																																																																																																																																																			
12 mm - 1.75	1744	6644																																																																																																																																																			
<u>Pipe</u>																																																																																																																																																					
1/8" - 27 NPT	1902	6702																																																																																																																																																			
1/8" - 28 BSP	1911	6711																																																																																																																																																			
<u>Threading Tools</u>		<u>Stock #</u>																																																																																																																																																			
Adj. Die Stock - 1" Hexagon Dies		11026																																																																																																																																																			
Plain Die Stock - 5/8" Hexagon Dies		12457																																																																																																																																																			
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088																																																																																																																																																			
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450																																																																																																																																																			
T-Handle Wrench - Taps No. 0 to 1/4"		12473																																																																																																																																																			
16 Leaf Metric Thread Pitch Gauge		11016																																																																																																																																																			
18 Leaf Standard Thread Pitch Gauge		11018																																																																																																																																																			
Screwdriver																																																																																																																																																					

- Plastic storage case



26376

Empty Plastic Case for 26376

26376MT



# HANSON® TAP AND DIE SETS

## Metric Tap and Die Combination Set

- Plastic storage case



97312

Description	Contents	Stock #
66 pc Set	Metric Sizes 3 mm to 24 mm Combination of Sets 97311 and 26317	97312
Thread Size	Tap Stock #	Die Stock #
<u>Metric</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>
3 mm - 0.50	1712	6312
4 mm - 0.70	1717	6317
4 mm - 0.75	1718	6318
5 mm - 0.80	1722	6322
5 mm - 0.90	1723	6323
6 mm - 1.00	1727	6327
		<u>1" Hexagon</u>
7 mm - 1.00	1731	6631
8 mm - 1.00	1733	6633
8 mm - 1.25	1734	6634
9 mm - 1.00	1736	6636
9 mm - 1.25	1737	6637
10 mm - 1.25	1739	6639
10 mm - 1.50	1740	6640
11 mm - 1.50	1741	6641
12 mm - 1.50	1743	6643
12 mm - 1.75	1744	6644
		<u>1-7/16" Hexagon</u>
14 mm - 1.25	2449*	6949
14 mm - 1.50	1750	6950
14 mm - 2.00	1752	6952
16 mm - 1.50	1755	6955
16 mm - 2.00	1756	6956
18 mm - 1.50	1759	6959
18 mm - 2.50	1761	6961
		<u>1-13/16" Hexagon</u>
20 mm - 2.50	1764	8564
22 mm - 1.50	1765	8565
24 mm - 2.00	1768	8568
24 mm - 3.00	1769	8569
<u>Pipe</u>		<u>1" Hexagon</u>
1/8" - 28 BSP	1911	6711
<u>Threading Tools</u>		<u>Stock #</u>
Adj. Die Stock - 1" Hexagon Dies		11026
Adj. Die Stock - 1-7/16" Hexagon Dies		12436
Adj. Die Stock - 1-3/16" Hexagon Dies		12446
Plain Die Stock - 5/8" Hexagon Dies		12457
T-Handle Wrench - Taps No. 0 to 1/4"		12473
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450
16 Leaf Metric Thread Pitch Gauge		11016
Screwdriver		
66 pc Set	Metric Sizes 3 mm to 24 mm Combination of Sets 26317 and Master Set 96311 Contents Identical to Set 97312 with Wooden Case	96312

- Wooden storage case

\* Spark plug tap

# HANSON® TAP AND DIE SETS

## Machine Screw/Fractional Tap and Die Combination Sets

Description	Contents	Stock #																																																																																																																																							
66 pc Set	Machine Screw and Fractional - Sizes No. 4 to 1" Combination of Sets 97094 and 24606	97606																																																																																																																																							
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Machine Screw</u></td><td><u>Plug Style</u></td><td><u>5/8" Hexagon</u></td></tr> <tr> <td>4 - 40 NC</td><td>1112</td><td>6112</td></tr> <tr> <td>6 - 32 NC</td><td>1118</td><td>6118</td></tr> <tr> <td>8 - 32 NC</td><td>1124</td><td>6124</td></tr> <tr> <td>10 - 24 NC</td><td>1128</td><td>6128</td></tr> <tr> <td>10 - 32 NF</td><td>1131</td><td>6131</td></tr> <tr> <td>12 - 24 NC</td><td>1132</td><td>6132</td></tr> <tr> <td><u>Fractional</u></td><td></td><td><u>1" Hexagon</u></td></tr> <tr> <td>1/4" - 20 NC</td><td>1420</td><td>6520</td></tr> <tr> <td>1/4" - 28 NF</td><td>1423</td><td>6523</td></tr> <tr> <td>5/16" - 18 NC</td><td>1427</td><td>6527</td></tr> <tr> <td>5/16" - 24 NF</td><td>1429</td><td>6529</td></tr> <tr> <td>3/8" - 16 NC</td><td>1434</td><td>6534</td></tr> <tr> <td>3/8" - 24 NF</td><td>1436</td><td>6536</td></tr> <tr> <td>7/16" - 14 NC</td><td>1439</td><td>6539</td></tr> <tr> <td>7/16" - 20 NF</td><td>1440</td><td>6540</td></tr> <tr> <td>1/2" - 13 NC</td><td>1444</td><td>6544</td></tr> <tr> <td>1/2" - 20 NF</td><td>1445</td><td>6545</td></tr> <tr> <td></td><td></td><td><u>1-7/16" Hexagon</u></td></tr> <tr> <td>9/16" - 12 NC</td><td>1448</td><td>6848</td></tr> <tr> <td>9/16" - 18 NF</td><td>1449</td><td>6849</td></tr> <tr> <td>5/8" - 11 NC</td><td>1452</td><td>6852</td></tr> <tr> <td>5/8" - 18 NF</td><td>1454</td><td>6854</td></tr> <tr> <td>3/4" - 10 NC</td><td>1458</td><td>6858</td></tr> <tr> <td>3/4" - 16 NF</td><td>1460</td><td>6860</td></tr> <tr> <td></td><td></td><td><u>1-13/16" Hexagon</u></td></tr> <tr> <td>7/8" - 9 NC</td><td>1461</td><td>8461</td></tr> <tr> <td>7/8" - 14 NF</td><td>1463</td><td>8463</td></tr> <tr> <td>1" - 8 NC</td><td>1465</td><td>8465</td></tr> <tr> <td>1" - 14 NS</td><td>1467</td><td>8467</td></tr> <tr> <td><u>Pipe</u></td><td></td><td><u>1" Hexagon</u></td></tr> <tr> <td>1/8" - 27 NPT</td><td>1902</td><td>6702</td></tr> <tr> <td>1/4" - 18 NPT</td><td>1903</td><td>7003</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adj. Die Stock - 1" Hexagon Dies</td><td></td><td>11026</td></tr> <tr> <td>Adj. Die Stock - 1-7/16" Hexagon Dies</td><td></td><td>12436</td></tr> <tr> <td>Adj. Die Stock - 1-13/16" Hexagon Dies</td><td></td><td>12446</td></tr> <tr> <td>Plain Die Stock - 5/8" Hexagon Dies</td><td></td><td>12457</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps No. 0 to 1/2"</td><td></td><td>311088</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps 1/4" to 1"</td><td></td><td>12498</td></tr> <tr> <td>Two-in-One Tap Wrench - Taps 1/4" to 1/2"</td><td></td><td>12450</td></tr> <tr> <td>T-Handle Wrench - Taps No. 0 to 1/4"</td><td></td><td>12473</td></tr> <tr> <td>18 Leaf Standard Thread Pitch Gauge</td><td></td><td>11018</td></tr> <tr> <td></td><td></td><td>Screwdriver</td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Machine Screw</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>	4 - 40 NC	1112	6112	6 - 32 NC	1118	6118	8 - 32 NC	1124	6124	10 - 24 NC	1128	6128	10 - 32 NF	1131	6131	12 - 24 NC	1132	6132	<u>Fractional</u>		<u>1" Hexagon</u>	1/4" - 20 NC	1420	6520	1/4" - 28 NF	1423	6523	5/16" - 18 NC	1427	6527	5/16" - 24 NF	1429	6529	3/8" - 16 NC	1434	6534	3/8" - 24 NF	1436	6536	7/16" - 14 NC	1439	6539	7/16" - 20 NF	1440	6540	1/2" - 13 NC	1444	6544	1/2" - 20 NF	1445	6545			<u>1-7/16" Hexagon</u>	9/16" - 12 NC	1448	6848	9/16" - 18 NF	1449	6849	5/8" - 11 NC	1452	6852	5/8" - 18 NF	1454	6854	3/4" - 10 NC	1458	6858	3/4" - 16 NF	1460	6860			<u>1-13/16" Hexagon</u>	7/8" - 9 NC	1461	8461	7/8" - 14 NF	1463	8463	1" - 8 NC	1465	8465	1" - 14 NS	1467	8467	<u>Pipe</u>		<u>1" Hexagon</u>	1/8" - 27 NPT	1902	6702	1/4" - 18 NPT	1903	7003	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1" Hexagon Dies		11026	Adj. Die Stock - 1-7/16" Hexagon Dies		12436	Adj. Die Stock - 1-13/16" Hexagon Dies		12446	Plain Die Stock - 5/8" Hexagon Dies		12457	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450	T-Handle Wrench - Taps No. 0 to 1/4"		12473	18 Leaf Standard Thread Pitch Gauge		11018			Screwdriver	
Thread Size	Tap Stock #	Die Stock #																																																																																																																																							
<u>Machine Screw</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>																																																																																																																																							
4 - 40 NC	1112	6112																																																																																																																																							
6 - 32 NC	1118	6118																																																																																																																																							
8 - 32 NC	1124	6124																																																																																																																																							
10 - 24 NC	1128	6128																																																																																																																																							
10 - 32 NF	1131	6131																																																																																																																																							
12 - 24 NC	1132	6132																																																																																																																																							
<u>Fractional</u>		<u>1" Hexagon</u>																																																																																																																																							
1/4" - 20 NC	1420	6520																																																																																																																																							
1/4" - 28 NF	1423	6523																																																																																																																																							
5/16" - 18 NC	1427	6527																																																																																																																																							
5/16" - 24 NF	1429	6529																																																																																																																																							
3/8" - 16 NC	1434	6534																																																																																																																																							
3/8" - 24 NF	1436	6536																																																																																																																																							
7/16" - 14 NC	1439	6539																																																																																																																																							
7/16" - 20 NF	1440	6540																																																																																																																																							
1/2" - 13 NC	1444	6544																																																																																																																																							
1/2" - 20 NF	1445	6545																																																																																																																																							
		<u>1-7/16" Hexagon</u>																																																																																																																																							
9/16" - 12 NC	1448	6848																																																																																																																																							
9/16" - 18 NF	1449	6849																																																																																																																																							
5/8" - 11 NC	1452	6852																																																																																																																																							
5/8" - 18 NF	1454	6854																																																																																																																																							
3/4" - 10 NC	1458	6858																																																																																																																																							
3/4" - 16 NF	1460	6860																																																																																																																																							
		<u>1-13/16" Hexagon</u>																																																																																																																																							
7/8" - 9 NC	1461	8461																																																																																																																																							
7/8" - 14 NF	1463	8463																																																																																																																																							
1" - 8 NC	1465	8465																																																																																																																																							
1" - 14 NS	1467	8467																																																																																																																																							
<u>Pipe</u>		<u>1" Hexagon</u>																																																																																																																																							
1/8" - 27 NPT	1902	6702																																																																																																																																							
1/4" - 18 NPT	1903	7003																																																																																																																																							
<u>Threading Tools</u>		<u>Stock #</u>																																																																																																																																							
Adj. Die Stock - 1" Hexagon Dies		11026																																																																																																																																							
Adj. Die Stock - 1-7/16" Hexagon Dies		12436																																																																																																																																							
Adj. Die Stock - 1-13/16" Hexagon Dies		12446																																																																																																																																							
Plain Die Stock - 5/8" Hexagon Dies		12457																																																																																																																																							
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088																																																																																																																																							
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498																																																																																																																																							
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450																																																																																																																																							
T-Handle Wrench - Taps No. 0 to 1/4"		12473																																																																																																																																							
18 Leaf Standard Thread Pitch Gauge		11018																																																																																																																																							
		Screwdriver																																																																																																																																							
66 pc Set	Machine Screw and Fractional - Sizes No. 4 to 1" Combination of Sets 97094 and 24606 Contents Identical to Set 97606 with Wooden Case	96606																																																																																																																																							

- Plastic storage case



97606

- Wooden storage case



96606

# HANSON® TAP AND DIE SETS

## Tap and Die Combination Sets Machine Screw and Fractional Sizes No. 4 to 1"



98614



99146



99606



99614



98146



98606

Description		Stock #
64 pc Set	Plug and Pipe Taps Solid and Adjustable Round Dies Plastic Storage Case Combination of Sets 98000 and 23614	98614
64 pc Set	Plug and Pipe Taps Solid and Adjustable Round Dies Wooden Storage Case Combination of Sets 99000 and 23614	99614
64 pc Set	Plug and Pipe Taps Solid and Adjustable Round Dies Plastic Storage Case Combination of Sets 98000 and 25914	98146
64 pc Set	Plug and Pipe Taps Solid and Adjustable Round Dies Wooden Storage Case Combination of Sets 99000 and 25914	99146
66 pc Set	Plug and Pipe Taps Adjustable Round, Solid Hexagon and Round Dies Plastic Storage Case Combination of Sets 98000 and 24606	98606
66 pc Set	Plug and Pipe Taps Adjustable Round Dies, Solid Hexagon and Round Dies Wooden Storage Case Combination of Sets 99000 and 24606	99606

See Chart on Page 14-36 for Set Compositions

# HANSON® TAP AND DIE SETS

CONTENTS FOR SET NUMBERS ON PAGE 14-35: 98614 - 99614 - 98146 - 99146 - 98606 - 99606

Thread Size Machine Screw	Tap Stock # Plug Style #	Set No.'s 98614 <sup>†</sup> and 99614 <sup>††</sup>	Set No.'s 98146 <sup>†</sup> and 99146 <sup>††</sup>	Set No.'s 98606 <sup>†</sup> and 99606 <sup>††</sup>
		Die Stock # 1" Solid Round	Die Stock # 1" Adj. Round	Die Stock # 5/8" Hexagon
4 - 40 NC	1112	3012	3712	6112
6 - 32 NC	1118	3018	3718	6118
8 - 32 NC	1124	3024	3724	6124
10 - 24 NC	1128	3028	3728	6128
10 - 32 NF	1131	3031	3731	6131
12 - 24 NC	1132	3032	3732	6132
Fractional				1" Hexagon
1/4" - 20 NC	1420	3120	3820	6520
1/4" - 28 NF	1423	3123	3823	6523
5/16" - 18 NC	1427	3127	3827	6527
5/16" - 24 NF	1429	3129	3829	6529
3/8" - 16 NC	1434	3134	3834	6534
3/8" - 24 NF	1436	3136	3836	6536
7/16" - 14 NC	1439	3139	3839	6539
7/16" - 20 NF	1440	3140	3840	6540
1/2" - 13 NC	1444	3144	3844	6544
1/2" - 20 NF	1445	3145	3845	6545
		1-1/2" Adj. Round	1-1/2" Adj. Round	1-1/2" Adj. Round
9/16" - 12 NC	1448	4048	4048	4048
9/16" - 18 NF	1449	4049	4049	4049
5/8" - 11 NC	1452	4052	4052	4052
5/8" - 18 NF	1454	4054	4054	4054
3/4" - 10 NC	1458	4058	4058	4058
3/4" - 16 NF	1460	4060	4060	4060
		2" Adj. Round	2" Adj. Round	2" Adj. Round
7/8" - 9 NC	1461	4261	4261	4261
7/8" - 14 NF	1463	4263	4263	4263
1" - 8 NC	1465	4265	4265	4265
1" - 12 NS	1466	4266*	4266	4266
Pipe		1" Solid Round	1" Solid Round	1" Hexagon
1/8" - 27 NPT	1902	3202	3202	6702
		1-1/2" Solid Round	1-1/2" Solid Round	1-1/2" Solid Round
1/4" - 18 NPT	1903	4103	4103	4103
Threading Tools	Stock #			
Adj. Die Stock - 1" Hexagon Dies	11026			X
Adj. Die Stock - 1" Round Dies	11025	X		
Adj. Die Stock - 1" Adj. Round Dies	12428		X	
Adj. Die Stock - 1-1/2" Adj. Round Dies	12435	X	X	X
Adj. Die Stock - 2" Adj. Round Dies	12445	X	X	X
Plain Die Stock - 5/8" Hexagon Dies	12457			X
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"	311088	X	X	X
Adj. Handle Tap Wrench - Taps 1/4" to 1"	12498	X	X	X
Two-in-One Tap Wrench - Taps 1/4" to 1/2"	12450			X
T-Handle Wrench - Taps No. 0 to 1/4"	12473			X
T-Handle Wrench - Taps No. 0 to 1/4"	12401	X	X	
18 Leaf Standard Thread Pitch Gauge	11018	X	X	X
Screwdriver		X	X	X

† Plastic Case

†† Wooden Case

\* 1" - 14 NS Tap (1467) and Die (4267) Replace 1" - 12 NS in 99614 Set Only

Taps, Dies and Screw Extractors

# HANSON® TAP AND DIE SETS

## Machine Screw/Fractional Tap and Die Set

- Plastic storage case



24640

Description	Contents	Stock #																																																																																																												
53 pc Set	Machine Screw and Fractional - Sizes No. 6 to 3/4"	24640																																																																																																												
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Machine Screw</u></td><td><u>Plug Style</u></td><td><u>1" Hexagon</u></td></tr> <tr> <td>6 - 32 NC</td><td>1118</td><td>6418</td></tr> <tr> <td>8 - 32 NC</td><td>1124</td><td>6424</td></tr> <tr> <td>10 - 24 NC</td><td>1128</td><td>6428</td></tr> <tr> <td>10 - 32 NF</td><td>1131</td><td>6431</td></tr> <tr> <td>12 - 24 NC</td><td>1132</td><td>6432</td></tr> <tr> <td><u>Fractional</u></td><td></td><td></td></tr> <tr> <td>1/4" - 20 NC</td><td>1420</td><td>6520</td></tr> <tr> <td>1/4" - 28 NF</td><td>1423</td><td>6523</td></tr> <tr> <td>5/16" - 18 NC</td><td>1427</td><td>6527</td></tr> <tr> <td>5/16" - 24 NF</td><td>1429</td><td>6529</td></tr> <tr> <td>3/8" - 16 NC</td><td>1434</td><td>6534</td></tr> <tr> <td>3/8" - 24 NF</td><td>1436</td><td>6536</td></tr> <tr> <td>7/16" - 14 NC</td><td>1439</td><td>6539</td></tr> <tr> <td>7/16" - 20 NF</td><td>1440</td><td>6540</td></tr> <tr> <td>1/2" - 13 NC</td><td>1444</td><td>6544</td></tr> <tr> <td>1/2" - 20 NF</td><td>1445</td><td>6545</td></tr> <tr> <td></td><td></td><td><u>1-7/16" Hexagon</u></td></tr> <tr> <td>9/16" - 12 NC</td><td>1448</td><td>6848</td></tr> <tr> <td>9/16" - 18 NF</td><td>1449</td><td>6849</td></tr> <tr> <td>5/8" - 11 NC</td><td>1452</td><td>6852</td></tr> <tr> <td>5/8" - 18 NF</td><td>1454</td><td>6854</td></tr> <tr> <td>3/4" - 10 NC</td><td>1458</td><td>6858</td></tr> <tr> <td>3/4" - 16 NF</td><td>1460</td><td>6860</td></tr> <tr> <td><u>Pipe</u></td><td></td><td><u>1" Hexagon</u></td></tr> <tr> <td>1/8" - 27 NPT Pipe</td><td>1902</td><td>6072</td></tr> <tr> <td>1/4" - 18 NPT Pipe</td><td>1903</td><td>6703</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adj. Die Stock - 1" Hexagon Dies</td><td></td><td>11026</td></tr> <tr> <td>Adj. Die Stock - 1-7/16" Hexagon Dies</td><td></td><td>12436</td></tr> <tr> <td>T-Handle Wrench - Taps No. 0 to 1/4"</td><td></td><td>12473</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps No. 0 to 1/2"</td><td></td><td>311088</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps 1/4" to 1"</td><td></td><td>12498</td></tr> <tr> <td>16 Leaf Standard Thread Pitch Gauge</td><td></td><td>11018</td></tr> <tr> <td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Machine Screw</u>	<u>Plug Style</u>	<u>1" Hexagon</u>	6 - 32 NC	1118	6418	8 - 32 NC	1124	6424	10 - 24 NC	1128	6428	10 - 32 NF	1131	6431	12 - 24 NC	1132	6432	<u>Fractional</u>			1/4" - 20 NC	1420	6520	1/4" - 28 NF	1423	6523	5/16" - 18 NC	1427	6527	5/16" - 24 NF	1429	6529	3/8" - 16 NC	1434	6534	3/8" - 24 NF	1436	6536	7/16" - 14 NC	1439	6539	7/16" - 20 NF	1440	6540	1/2" - 13 NC	1444	6544	1/2" - 20 NF	1445	6545			<u>1-7/16" Hexagon</u>	9/16" - 12 NC	1448	6848	9/16" - 18 NF	1449	6849	5/8" - 11 NC	1452	6852	5/8" - 18 NF	1454	6854	3/4" - 10 NC	1458	6858	3/4" - 16 NF	1460	6860	<u>Pipe</u>		<u>1" Hexagon</u>	1/8" - 27 NPT Pipe	1902	6072	1/4" - 18 NPT Pipe	1903	6703	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1" Hexagon Dies		11026	Adj. Die Stock - 1-7/16" Hexagon Dies		12436	T-Handle Wrench - Taps No. 0 to 1/4"		12473	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	16 Leaf Standard Thread Pitch Gauge		11018	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																																																																												
<u>Machine Screw</u>	<u>Plug Style</u>	<u>1" Hexagon</u>																																																																																																												
6 - 32 NC	1118	6418																																																																																																												
8 - 32 NC	1124	6424																																																																																																												
10 - 24 NC	1128	6428																																																																																																												
10 - 32 NF	1131	6431																																																																																																												
12 - 24 NC	1132	6432																																																																																																												
<u>Fractional</u>																																																																																																														
1/4" - 20 NC	1420	6520																																																																																																												
1/4" - 28 NF	1423	6523																																																																																																												
5/16" - 18 NC	1427	6527																																																																																																												
5/16" - 24 NF	1429	6529																																																																																																												
3/8" - 16 NC	1434	6534																																																																																																												
3/8" - 24 NF	1436	6536																																																																																																												
7/16" - 14 NC	1439	6539																																																																																																												
7/16" - 20 NF	1440	6540																																																																																																												
1/2" - 13 NC	1444	6544																																																																																																												
1/2" - 20 NF	1445	6545																																																																																																												
		<u>1-7/16" Hexagon</u>																																																																																																												
9/16" - 12 NC	1448	6848																																																																																																												
9/16" - 18 NF	1449	6849																																																																																																												
5/8" - 11 NC	1452	6852																																																																																																												
5/8" - 18 NF	1454	6854																																																																																																												
3/4" - 10 NC	1458	6858																																																																																																												
3/4" - 16 NF	1460	6860																																																																																																												
<u>Pipe</u>		<u>1" Hexagon</u>																																																																																																												
1/8" - 27 NPT Pipe	1902	6072																																																																																																												
1/4" - 18 NPT Pipe	1903	6703																																																																																																												
<u>Threading Tools</u>		<u>Stock #</u>																																																																																																												
Adj. Die Stock - 1" Hexagon Dies		11026																																																																																																												
Adj. Die Stock - 1-7/16" Hexagon Dies		12436																																																																																																												
T-Handle Wrench - Taps No. 0 to 1/4"		12473																																																																																																												
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088																																																																																																												
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498																																																																																																												
16 Leaf Standard Thread Pitch Gauge		11018																																																																																																												
Screwdriver																																																																																																														

Empty Plastic Case for 24640

24640MT



# HANSON® TAP AND DIE SETS

## Metric Tap and Die Set

- Plastic storage case

Description	Contents	Stock #																																																																																																									
53 pc Set	Metric - Sizes 3 mm to 18 mm	26394																																																																																																									
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Metric</u></td><td><u>Plug Style</u></td><td><u>1" Hexagon</u></td></tr> <tr><td>3 mm - 0.50</td><td>1712</td><td>6612</td></tr> <tr><td>4 mm - 0.70</td><td>1717</td><td>6617</td></tr> <tr><td>4 mm - 0.75</td><td>1718</td><td>6618</td></tr> <tr><td>5 mm - 0.80</td><td>1722</td><td>6622</td></tr> <tr><td>5 mm - 0.90</td><td>1723</td><td>6623</td></tr> <tr><td>6 mm - 1.00</td><td>1727</td><td>6627</td></tr> <tr><td>7 mm - 1.00</td><td>1731</td><td>6631</td></tr> <tr><td>8 mm - 1.25</td><td>1734</td><td>6634</td></tr> <tr><td>9 mm - 1.00</td><td>1736</td><td>6636</td></tr> <tr><td>9 mm - 1.25</td><td>1737</td><td>6637</td></tr> <tr><td>10 mm - 1.25</td><td>1739</td><td>6639</td></tr> <tr><td>10 mm - 1.50</td><td>1740</td><td>6640</td></tr> <tr><td>11 mm - 1.50</td><td>1741</td><td>6641</td></tr> <tr><td>12 mm - 1.50</td><td>1743</td><td>6643</td></tr> <tr><td>12 mm - 1.75</td><td>1744</td><td>6644</td></tr> <tr><td colspan="2"></td><td><u>1-7/16" Hexagon</u></td></tr> <tr><td>14 mm - 1.25</td><td>1749</td><td>6949</td></tr> <tr><td>14 mm - 2.00</td><td>1752</td><td>6952</td></tr> <tr><td>16 mm - 1.50</td><td>1755</td><td>6955</td></tr> <tr><td>16 mm - 2.00</td><td>1756</td><td>6956</td></tr> <tr><td>18 mm - 1.50</td><td>1759</td><td>6959</td></tr> <tr><td>18 mm - 2.50</td><td>1761</td><td>6961</td></tr> <tr><td><u>Pipe</u></td><td></td><td><u>1" Hexagon</u></td></tr> <tr><td>1/8" - 28 BSP</td><td>1911</td><td>6711</td></tr> <tr><td>1/4" - 19 BSP</td><td>1912</td><td>6712</td></tr> <tr><td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr><td>Adj. Die Stock - 1" Hexagon Dies</td><td></td><td>11026</td></tr> <tr><td>Adj. Die Stock - 1-7/16" Hexagon Dies</td><td></td><td>12436</td></tr> <tr><td>T-Handle Wrench - Taps No. 0 to 1/4"</td><td></td><td>12473</td></tr> <tr><td>Adj. Handle Tap Wrench - Taps No. 0 to 1/2"</td><td></td><td>311088</td></tr> <tr><td>Adj. Handle Tap Wrench - Taps 1/4" to 1"</td><td></td><td>12498</td></tr> <tr><td>16 Leaf Metric Thread Pitch Gauge</td><td></td><td>11016</td></tr> <tr><td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Metric</u>	<u>Plug Style</u>	<u>1" Hexagon</u>	3 mm - 0.50	1712	6612	4 mm - 0.70	1717	6617	4 mm - 0.75	1718	6618	5 mm - 0.80	1722	6622	5 mm - 0.90	1723	6623	6 mm - 1.00	1727	6627	7 mm - 1.00	1731	6631	8 mm - 1.25	1734	6634	9 mm - 1.00	1736	6636	9 mm - 1.25	1737	6637	10 mm - 1.25	1739	6639	10 mm - 1.50	1740	6640	11 mm - 1.50	1741	6641	12 mm - 1.50	1743	6643	12 mm - 1.75	1744	6644			<u>1-7/16" Hexagon</u>	14 mm - 1.25	1749	6949	14 mm - 2.00	1752	6952	16 mm - 1.50	1755	6955	16 mm - 2.00	1756	6956	18 mm - 1.50	1759	6959	18 mm - 2.50	1761	6961	<u>Pipe</u>		<u>1" Hexagon</u>	1/8" - 28 BSP	1911	6711	1/4" - 19 BSP	1912	6712	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1" Hexagon Dies		11026	Adj. Die Stock - 1-7/16" Hexagon Dies		12436	T-Handle Wrench - Taps No. 0 to 1/4"		12473	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	16 Leaf Metric Thread Pitch Gauge		11016	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																																																																									
<u>Metric</u>	<u>Plug Style</u>	<u>1" Hexagon</u>																																																																																																									
3 mm - 0.50	1712	6612																																																																																																									
4 mm - 0.70	1717	6617																																																																																																									
4 mm - 0.75	1718	6618																																																																																																									
5 mm - 0.80	1722	6622																																																																																																									
5 mm - 0.90	1723	6623																																																																																																									
6 mm - 1.00	1727	6627																																																																																																									
7 mm - 1.00	1731	6631																																																																																																									
8 mm - 1.25	1734	6634																																																																																																									
9 mm - 1.00	1736	6636																																																																																																									
9 mm - 1.25	1737	6637																																																																																																									
10 mm - 1.25	1739	6639																																																																																																									
10 mm - 1.50	1740	6640																																																																																																									
11 mm - 1.50	1741	6641																																																																																																									
12 mm - 1.50	1743	6643																																																																																																									
12 mm - 1.75	1744	6644																																																																																																									
		<u>1-7/16" Hexagon</u>																																																																																																									
14 mm - 1.25	1749	6949																																																																																																									
14 mm - 2.00	1752	6952																																																																																																									
16 mm - 1.50	1755	6955																																																																																																									
16 mm - 2.00	1756	6956																																																																																																									
18 mm - 1.50	1759	6959																																																																																																									
18 mm - 2.50	1761	6961																																																																																																									
<u>Pipe</u>		<u>1" Hexagon</u>																																																																																																									
1/8" - 28 BSP	1911	6711																																																																																																									
1/4" - 19 BSP	1912	6712																																																																																																									
<u>Threading Tools</u>		<u>Stock #</u>																																																																																																									
Adj. Die Stock - 1" Hexagon Dies		11026																																																																																																									
Adj. Die Stock - 1-7/16" Hexagon Dies		12436																																																																																																									
T-Handle Wrench - Taps No. 0 to 1/4"		12473																																																																																																									
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088																																																																																																									
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498																																																																																																									
16 Leaf Metric Thread Pitch Gauge		11016																																																																																																									
Screwdriver																																																																																																											

Empty Plastic Case for 26394

26394MT



26394

# HANSON® TAP AND DIE SETS

## Machine Screw/Fractional Tap and Die Super Set

- Plastic storage case with removable tray keeps all tools organized



24606



24607

Description	Contents	Stock #																																																																																							
41 pc Set	Machine Screw and Fractional Sizes - No. 4 to 1/2"	24606																																																																																							
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Machine Screw</u></td><td><u>Plug Style</u></td><td><u>5/8" Hexagon</u></td></tr> <tr> <td>4 - 40 NC</td><td>1112</td><td>6112</td></tr> <tr> <td>6 - 32 NC</td><td>1118</td><td>6118</td></tr> <tr> <td>8 - 32 NC</td><td>1124</td><td>6124</td></tr> <tr> <td>10 - 24 NC</td><td>1128</td><td>6128</td></tr> <tr> <td>10 - 32 NF</td><td>1131</td><td>6131</td></tr> <tr> <td>12 - 24 NC</td><td>1132</td><td>6132</td></tr> <tr> <td><u>Fractional</u></td><td></td><td><u>1" Hexagon</u></td></tr> <tr> <td>1/4" - 20 NC</td><td>1420</td><td>6520</td></tr> <tr> <td>1/4" - 28 NF</td><td>1423</td><td>6523</td></tr> <tr> <td>5/16" - 18 NC</td><td>1427</td><td>6527</td></tr> <tr> <td>5/16" - 24 NF</td><td>1429</td><td>6529</td></tr> <tr> <td>3/8" - 16 NC</td><td>1434</td><td>6534</td></tr> <tr> <td>3/8" - 24 NF</td><td>1436</td><td>6536</td></tr> <tr> <td>7/16" - 14 NC</td><td>1439</td><td>6539</td></tr> <tr> <td>7/16" - 20 NF</td><td>1440</td><td>6540</td></tr> <tr> <td>1/2" - 13 NC</td><td>1444</td><td>6544</td></tr> <tr> <td>1/2" - 20 NF</td><td>1445</td><td>6545</td></tr> <tr> <td><u>Pipe</u></td><td></td><td><u>1" Hexagon</u></td></tr> <tr> <td>1/8" - 27 NPT</td><td>1902</td><td>6702</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adj. Die Stock - 1" Hexagon Dies</td><td></td><td>11026</td></tr> <tr> <td>Plain Die Stock - 5/8" Hexagon Dies</td><td></td><td>12457</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps No. 0 to 1/2"</td><td></td><td>311088</td></tr> <tr> <td>T-Handle Wrench - Taps No. 0 to 1/4"</td><td></td><td>12473</td></tr> <tr> <td>Two-in-One Tap Wrench - Taps 1/4" to 1/2"</td><td></td><td>12450</td></tr> <tr> <td>18 Leaf Standard Thread Pitch Gauge</td><td></td><td>11018</td></tr> <tr> <td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Machine Screw</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>	4 - 40 NC	1112	6112	6 - 32 NC	1118	6118	8 - 32 NC	1124	6124	10 - 24 NC	1128	6128	10 - 32 NF	1131	6131	12 - 24 NC	1132	6132	<u>Fractional</u>		<u>1" Hexagon</u>	1/4" - 20 NC	1420	6520	1/4" - 28 NF	1423	6523	5/16" - 18 NC	1427	6527	5/16" - 24 NF	1429	6529	3/8" - 16 NC	1434	6534	3/8" - 24 NF	1436	6536	7/16" - 14 NC	1439	6539	7/16" - 20 NF	1440	6540	1/2" - 13 NC	1444	6544	1/2" - 20 NF	1445	6545	<u>Pipe</u>		<u>1" Hexagon</u>	1/8" - 27 NPT	1902	6702	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1" Hexagon Dies		11026	Plain Die Stock - 5/8" Hexagon Dies		12457	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	T-Handle Wrench - Taps No. 0 to 1/4"		12473	Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450	18 Leaf Standard Thread Pitch Gauge		11018	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																																																							
<u>Machine Screw</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>																																																																																							
4 - 40 NC	1112	6112																																																																																							
6 - 32 NC	1118	6118																																																																																							
8 - 32 NC	1124	6124																																																																																							
10 - 24 NC	1128	6128																																																																																							
10 - 32 NF	1131	6131																																																																																							
12 - 24 NC	1132	6132																																																																																							
<u>Fractional</u>		<u>1" Hexagon</u>																																																																																							
1/4" - 20 NC	1420	6520																																																																																							
1/4" - 28 NF	1423	6523																																																																																							
5/16" - 18 NC	1427	6527																																																																																							
5/16" - 24 NF	1429	6529																																																																																							
3/8" - 16 NC	1434	6534																																																																																							
3/8" - 24 NF	1436	6536																																																																																							
7/16" - 14 NC	1439	6539																																																																																							
7/16" - 20 NF	1440	6540																																																																																							
1/2" - 13 NC	1444	6544																																																																																							
1/2" - 20 NF	1445	6545																																																																																							
<u>Pipe</u>		<u>1" Hexagon</u>																																																																																							
1/8" - 27 NPT	1902	6702																																																																																							
<u>Threading Tools</u>		<u>Stock #</u>																																																																																							
Adj. Die Stock - 1" Hexagon Dies		11026																																																																																							
Plain Die Stock - 5/8" Hexagon Dies		12457																																																																																							
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088																																																																																							
T-Handle Wrench - Taps No. 0 to 1/4"		12473																																																																																							
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450																																																																																							
18 Leaf Standard Thread Pitch Gauge		11018																																																																																							
Screwdriver																																																																																									
	Empty Plastic Case for 24606	24606MT																																																																																							
41 pc Set	Contents same as 24606, in Clamshell	24607																																																																																							

# HANSON® TAP AND DIE SETS

## Metric Tap and Die Super Set

Description	Contents	Stock #
41 pc Set	Metric Sizes 3 mm to 12 mm	26317
	Thread Size      Tap Stock #	
	<u>Metric</u> <u>Plug Style</u> <u>5/8" Die Stock #</u>	
	3 mm - 0.50      1712      6312	
	4 mm - 0.70      1717      6317	
	4 mm - 0.75      1718      6318	
	5 mm - 0.80      1722      6322	
	5 mm - 0.90      1723      6323	
	6 mm - 1.00      1727      6327	
		<u>1" Die Stock #</u>
	7 mm - 1.00      1731      6631	
	8 mm - 1.00      1733      6633	
	8 mm - 1.25      1734      6634	
	9 mm - 1.00      1736      6636	
	9 mm - 1.25      1737      6637	
	10 mm - 1.25      1739      6639	
	10 mm - 1.50      1740      6640	
	11 mm - 1.50      1741      6641	
	12 mm - 1.50      1743      6643	
	12 mm - 1.75      1744      6644	
	<u>Pipe</u> <u>Stock #</u>	
	1/8" - 28 BSP      1911      6711	
	<u>Threading Tools</u> <u>Stock #</u>	
	Adj. Die Stock - 1" Hexagon Dies      11026	
	Plain Die Stock - 5/8" Hexagon Dies      12457	
	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"      311088	
	T-Handle Wrench - Taps No. 0 to 1/4"      12473	
	Two-in-One Tap Wrench - Taps 1/4" to 1/2"      12450	
	16 Leaf Metric Thread Pitch Gauge      11016	
	Screwdriver	

Empty Plastic Case for 26317

26317MT

- Plastic storage case



26317

# HANSON® TAP AND DIE SETS

## Fractional/Metric Tap and Die Super Set

- Plastic storage case



26319

Description	Contents		Stock #
41 pc Set	Combination Machine Screw, Fractional and Metric		26319
Thread Size	Tap Stock #	Die Stock #	
<u>Machine Screw</u>	<u>Plug Style</u>	<u>5/8" Hexagon</u>	
6 - 32 NC	1118	6118	
8 - 32 NC	1124	6124	
10 - 24 NC	1128	6128	
<u>Fractional</u>		<u>1" Hexagon</u>	
1/4" - 20 NC	1420	6520	
5/16" - 18 NC	1427	6527	
3/8" - 16 NC	1434	6534	
7/16" - 14 NC	1439	6539	
1/2" - 13 NC	1444	6544	
1/8" - 27 NPT	1902	6702	
<u>Metric</u>		<u>5/8" Hexagon</u>	
4 mm - 0.75 mm	1718	6318	
5 mm - 0.80 mm	1722	6322	
6 mm - 1.00 mm	1727	6327	
		<u>1" Hexagon</u>	
7 mm - 1.00 mm	1731	6631	
8 mm - 1.25 mm	1734	6634	
10 mm - 1.25 mm	1739	6639	
10 mm - 1.50 mm	1740	6640	
12 mm - 1.75 mm	1744	6644	
<u>Threading Tools</u>		<u>Stock #</u>	
Adj. Die Stock - 1" Hexagon Dies		11026	
Plain Die Stock - 5/8" Hexagon Dies		12457	
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	
T-Handle Wrench - Taps No. 0 to 1/4"		12473	
Two-in-One Tap Wrench - Taps 1/4" to 1/2"		12450	
Standard and Metric Thread Pitch Gauge		11017	
Screwdriver			

Empty Plastic Case for 26319

26319MT

# HANSON® TAP AND DIE SETS

## High Carbon Steel Tap and Adjustable / Solid Round Die Super Set

- Plastic storage case

Description	Contents	Stock #																																																																																	
41 pc Set	Fractional Sizes 1/4" to 3/4"	25941																																																																																	
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Fractional</u></td><td><u>Plug Style</u></td><td><u>1-1/2" Adj. Round</u></td></tr> <tr><td>1/4" - 20 NC</td><td>1420</td><td>4020</td></tr> <tr><td>1/4" - 28 NF</td><td>1423</td><td>4023</td></tr> <tr><td>5/16" - 18 NC</td><td>1427</td><td>4027</td></tr> <tr><td>5/16" - 24 NF</td><td>1429</td><td>4029</td></tr> <tr><td>3/8" - 16 NC</td><td>1434</td><td>4034</td></tr> <tr><td>3/8" - 24 NF</td><td>1436</td><td>4036</td></tr> <tr><td>7/16" - 14 NC</td><td>1439</td><td>4039</td></tr> <tr><td>7/16" - 20 NF</td><td>1440</td><td>4040</td></tr> <tr><td>1/2" - 13 NC</td><td>1444</td><td>4044</td></tr> <tr><td>1/2" - 20 NF</td><td>1445</td><td>4045</td></tr> <tr><td>9/16" - 12 NC</td><td>1448</td><td>4048</td></tr> <tr><td>9/16" - 18 NF</td><td>1449</td><td>4049</td></tr> <tr><td>5/8" - 11 NC</td><td>1452</td><td>4052</td></tr> <tr><td>5/8" - 18 NF</td><td>1454</td><td>4054</td></tr> <tr><td>3/4" - 10 NC</td><td>1458</td><td>4058</td></tr> <tr><td>3/4" - 16 NF</td><td>1460</td><td>4060</td></tr> <tr> <td><u>Pipe</u></td><td></td><td><u>1-1/2" Solid Round</u></td></tr> <tr><td>1/8" - 27 NPT</td><td>1902</td><td>4102</td></tr> <tr><td>1/4" - 18 NPT</td><td>1903</td><td>4103</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr><td>Adj. Die Stock - 1-1/2" Round Dies</td><td></td><td>12435</td></tr> <tr><td>T-Handle Wrench - Taps 1/4" to 1/2"</td><td></td><td>12402</td></tr> <tr><td>Adj. Handle Tap Wrench - Taps 1/4" to 1"</td><td></td><td>12498</td></tr> <tr><td>18 Leaf Standard Thread Pitch Gauge</td><td></td><td>11018</td></tr> <tr><td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Fractional</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>	1/4" - 20 NC	1420	4020	1/4" - 28 NF	1423	4023	5/16" - 18 NC	1427	4027	5/16" - 24 NF	1429	4029	3/8" - 16 NC	1434	4034	3/8" - 24 NF	1436	4036	7/16" - 14 NC	1439	4039	7/16" - 20 NF	1440	4040	1/2" - 13 NC	1444	4044	1/2" - 20 NF	1445	4045	9/16" - 12 NC	1448	4048	9/16" - 18 NF	1449	4049	5/8" - 11 NC	1452	4052	5/8" - 18 NF	1454	4054	3/4" - 10 NC	1458	4058	3/4" - 16 NF	1460	4060	<u>Pipe</u>		<u>1-1/2" Solid Round</u>	1/8" - 27 NPT	1902	4102	1/4" - 18 NPT	1903	4103	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1-1/2" Round Dies		12435	T-Handle Wrench - Taps 1/4" to 1/2"		12402	Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	18 Leaf Standard Thread Pitch Gauge		11018	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																																																	
<u>Fractional</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>																																																																																	
1/4" - 20 NC	1420	4020																																																																																	
1/4" - 28 NF	1423	4023																																																																																	
5/16" - 18 NC	1427	4027																																																																																	
5/16" - 24 NF	1429	4029																																																																																	
3/8" - 16 NC	1434	4034																																																																																	
3/8" - 24 NF	1436	4036																																																																																	
7/16" - 14 NC	1439	4039																																																																																	
7/16" - 20 NF	1440	4040																																																																																	
1/2" - 13 NC	1444	4044																																																																																	
1/2" - 20 NF	1445	4045																																																																																	
9/16" - 12 NC	1448	4048																																																																																	
9/16" - 18 NF	1449	4049																																																																																	
5/8" - 11 NC	1452	4052																																																																																	
5/8" - 18 NF	1454	4054																																																																																	
3/4" - 10 NC	1458	4058																																																																																	
3/4" - 16 NF	1460	4060																																																																																	
<u>Pipe</u>		<u>1-1/2" Solid Round</u>																																																																																	
1/8" - 27 NPT	1902	4102																																																																																	
1/4" - 18 NPT	1903	4103																																																																																	
<u>Threading Tools</u>		<u>Stock #</u>																																																																																	
Adj. Die Stock - 1-1/2" Round Dies		12435																																																																																	
T-Handle Wrench - Taps 1/4" to 1/2"		12402																																																																																	
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498																																																																																	
18 Leaf Standard Thread Pitch Gauge		11018																																																																																	
Screwdriver																																																																																			
Empty Plastic Case for 25941		25941MT																																																																																	



25941



# HANSON® TAP AND DIE SETS

## High Carbon Steel Tap and Solid Round Die Super Set

- Plastic storage case



23614

Description	Contents		Stock #
39 pc Set	Machine Screw and Fractional Sizes No. 4 to 1/2"		23614
	Thread Size	Tap Stock #	Die Stock #
	<u>Machine Screw</u>	<u>Plug Style</u>	<u>1" Solid Round</u>
	4 - 40 NC	1112	3012
	6 - 32 NC	1118	3018
	8 - 32 NC	1124	3024
	10 - 24 NC	1128	3028
	10 - 32 NF	1131	3031
	12 - 24 NC	1132	3032
	<u>Fractional</u>		
	1/4" - 20 NC	1420	3120
	1/4" - 28 NF	1423	3123
	5/16" - 18 NC	1427	3127
	5/16" - 24 NF	1429	3129
	3/8" - 16 NC	1434	3134
	3/8" - 24 NF	1436	3136
	7/16" - 14 NC	1439	3139
	7/16" - 20 NF	1440	3140
	1/2" - 13 NC	1444	3144
	1/2" - 20 NF	1445	3145
	<u>Pipe</u>		
	1/8" - 27 NPT	1902	3202
	<u>Threading Tools</u>		<u>Stock #</u>
	Adj. Die Stock - 1" Solid Round Dies		11025
	T-Handle Wrench - Taps No. 0 to 1/4"		12401
	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088
	18 Leaf Standard Thread Pitch Gauge		11018
	Screwdriver		

Empty Plastic Case for 23614

23614MT

# HANSON® TAP AND DIE SETS

## High Carbon Steel Tap and Adjustable Round Die Set

Description	Contents	Stock #																																																																																	
39 pc Set	Machine Screw and Fractional Sizes No. 4 to 1/2"	25914																																																																																	
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Machine Screw</u></td><td><u>Plug Style</u></td><td><u>1-1/2" Adj. Round</u></td></tr> <tr> <td>4 - 40 NC</td><td>1112</td><td>3712</td></tr> <tr> <td>6 - 32 NC</td><td>1118</td><td>3718</td></tr> <tr> <td>8 - 32 NC</td><td>1124</td><td>3724</td></tr> <tr> <td>10 - 24 NC</td><td>1128</td><td>3728</td></tr> <tr> <td>10 - 32 NF</td><td>1131</td><td>3731</td></tr> <tr> <td>12 - 24 NC</td><td>1132</td><td>3732</td></tr> <tr> <td><u>Fractional</u></td><td></td><td></td></tr> <tr> <td>1/4" - 20 NC</td><td>1420</td><td>3820</td></tr> <tr> <td>1/4" - 28 NF</td><td>1423</td><td>3823</td></tr> <tr> <td>5/16" - 18 NC</td><td>1427</td><td>3827</td></tr> <tr> <td>5/16" - 24 NF</td><td>1429</td><td>3829</td></tr> <tr> <td>3/8" - 16 NC</td><td>1434</td><td>3834</td></tr> <tr> <td>3/8" - 24 NF</td><td>1436</td><td>3836</td></tr> <tr> <td>7/16" - 14 NC</td><td>1439</td><td>3839</td></tr> <tr> <td>7/16" - 20 NF</td><td>1440</td><td>3840</td></tr> <tr> <td>1/2" - 13 NC</td><td>1444</td><td>3844</td></tr> <tr> <td>1/2" - 20 NF</td><td>1445</td><td>3845</td></tr> <tr> <td><u>Pipe</u></td><td></td><td></td></tr> <tr> <td>1/8" - 27 NPT</td><td>1902</td><td>3202</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adj. Die Stock - 1" Adj. Round Dies</td><td></td><td>12428</td></tr> <tr> <td>T-Handle Wrench - Taps No. 0 to 1/4"</td><td></td><td>12401</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps No. 0 to 1/2"</td><td></td><td>311088</td></tr> <tr> <td>18 Leaf Standard Thread Pitch Gauge</td><td></td><td>11018</td></tr> <tr> <td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Machine Screw</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>	4 - 40 NC	1112	3712	6 - 32 NC	1118	3718	8 - 32 NC	1124	3724	10 - 24 NC	1128	3728	10 - 32 NF	1131	3731	12 - 24 NC	1132	3732	<u>Fractional</u>			1/4" - 20 NC	1420	3820	1/4" - 28 NF	1423	3823	5/16" - 18 NC	1427	3827	5/16" - 24 NF	1429	3829	3/8" - 16 NC	1434	3834	3/8" - 24 NF	1436	3836	7/16" - 14 NC	1439	3839	7/16" - 20 NF	1440	3840	1/2" - 13 NC	1444	3844	1/2" - 20 NF	1445	3845	<u>Pipe</u>			1/8" - 27 NPT	1902	3202	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1" Adj. Round Dies		12428	T-Handle Wrench - Taps No. 0 to 1/4"		12401	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	18 Leaf Standard Thread Pitch Gauge		11018	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																																																	
<u>Machine Screw</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>																																																																																	
4 - 40 NC	1112	3712																																																																																	
6 - 32 NC	1118	3718																																																																																	
8 - 32 NC	1124	3724																																																																																	
10 - 24 NC	1128	3728																																																																																	
10 - 32 NF	1131	3731																																																																																	
12 - 24 NC	1132	3732																																																																																	
<u>Fractional</u>																																																																																			
1/4" - 20 NC	1420	3820																																																																																	
1/4" - 28 NF	1423	3823																																																																																	
5/16" - 18 NC	1427	3827																																																																																	
5/16" - 24 NF	1429	3829																																																																																	
3/8" - 16 NC	1434	3834																																																																																	
3/8" - 24 NF	1436	3836																																																																																	
7/16" - 14 NC	1439	3839																																																																																	
7/16" - 20 NF	1440	3840																																																																																	
1/2" - 13 NC	1444	3844																																																																																	
1/2" - 20 NF	1445	3845																																																																																	
<u>Pipe</u>																																																																																			
1/8" - 27 NPT	1902	3202																																																																																	
<u>Threading Tools</u>		<u>Stock #</u>																																																																																	
Adj. Die Stock - 1" Adj. Round Dies		12428																																																																																	
T-Handle Wrench - Taps No. 0 to 1/4"		12401																																																																																	
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088																																																																																	
18 Leaf Standard Thread Pitch Gauge		11018																																																																																	
Screwdriver																																																																																			

Empty Plastic Case for 25914

25914MT

- Plastic storage case



25914

# HANSON® TAP AND DIE SETS

## Fractional Tap and Hexagon Die Master Set

- Plastic storage case



97094

Description	Contents	Stock #
25 pc Set	Fractional Sizes 9/16" to 1"	97094
Thread Size	Tap Stock #	Die Stock #
<u>Fractional</u>	<u>Plug Style</u>	<u>1-7/16" Hexagon</u>
9/16" - 12 NC	1448	6848
9/16" - 18 NF	1449	6849
5/8" - 11 NC	1452	6852
5/8" - 18 NF	1454	6854
3/4" - 10 NC	1458	6858
3/4" - 16 NF	1460	6860
		<u>1-13/16" Hexagon</u>
7/8" - 9 NC	1461	8461
7/8" - 14 NF	1463	8463
1" - 8 NC	1465	8465
1" - 14 NS	1467	8467
<u>Pipe</u>		<u>1-7/16" Hexagon</u>
1/4" - 18 NPT	1903	7003
<u>Threading Tools</u>		<u>Stock #</u>
Adj. Die Stock - 1-7/16" Hexagon Dies		12436
Adj. Die Stock - 1-13/16" Hexagon Dies		12446
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498

Empty Plastic Case for 97094

97094MT

## Fractional Tap and Adjustable Round Die Master Set

- Plastic storage case



98000

Description	Contents	Stock #
25 pc Set	Fractional Sizes 9/16" to 1"	98000
Thread Size	Tap Stock #	Die Stock #
<u>Fractional</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>
9/16" - 12 NC	1448	4048
9/16" - 18 NF	1449	4049
5/8" - 11 NC	1452	4052
5/8" - 18 NF	1454	4054
3/4" - 10 NC	1458	4058
3/4" - 16 NF	1460	4060
		<u>2" Adj. Round</u>
7/8" - 9 NC	1461	4261
7/8" - 14 NF	1463	4263
1" - 8 NC	1465	4265
1" - 14 NS	1467	4267
<u>Pipe</u>		<u>1-1/2" Solid Round</u>
1/4" - 18 NPT	1903	4103
<u>Threading Tools</u>		<u>Stock #</u>
Adj. Die Stock - 1-1/2" Adj. Round Dies		12435
Adj. Die Stock - 2" Adj. Round Dies		12445
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498

Empty Plastic Case for 98000

98000MT

- Wooden storage case

25 pc Set	Fractional Sizes 9/16" to 1"	99000
	Contents Identical to Set 98000 with wooden case	

Empty Wooden Case for 99000

99000MT

# HANSON® TAP AND DIE SETS

## Metric Tap and Hexagon Die Master Set

Description	Contents	Stock #																																																																		
25 pc Set	Metric Sizes 14 mm to 24 mm	97311																																																																		
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Metric</u></td><td><u>Plug Style</u></td><td><u>1-7/16" Hexagon</u></td></tr> <tr> <td>14 mm - 1.25 mm</td><td>2449*</td><td>6949</td></tr> <tr> <td>14 mm - 1.50 mm</td><td>1750</td><td>6950</td></tr> <tr> <td>14 mm - 2.00 mm</td><td>1752</td><td>6952</td></tr> <tr> <td>16 mm - 1.50 mm</td><td>1755</td><td>6955</td></tr> <tr> <td>16 mm - 2.00 mm</td><td>1756</td><td>6956</td></tr> <tr> <td>18 mm - 1.50 mm</td><td>1759</td><td>6959</td></tr> <tr> <td>18 mm - 2.50 mm</td><td>1761</td><td>6961</td></tr> <tr> <td></td><td></td><td><u>1-13/16" Hexagon</u></td></tr> <tr> <td>20 mm - 2.50 mm</td><td>1764</td><td>8564</td></tr> <tr> <td>22 mm - 1.50 mm</td><td>1765</td><td>8565</td></tr> <tr> <td>24 mm - 2.00 mm</td><td>1768</td><td>8568</td></tr> <tr> <td>24 mm - 3.00 mm</td><td>1769</td><td>8569</td></tr> <tr> <td></td><td></td><td><u>Threading Tools</u></td></tr> <tr> <td></td><td></td><td><u>Stock #</u></td></tr> <tr> <td></td><td></td><td>Adj. Die Stock - 1-7/16" Hexagon Dies</td></tr> <tr> <td></td><td></td><td>12436</td></tr> <tr> <td></td><td></td><td>Adj. Die Stock - 1-13/16" Hexagon Dies</td></tr> <tr> <td></td><td></td><td>12446</td></tr> <tr> <td></td><td></td><td>Adj. Handle Tap Wrench - Taps 1/4" to 1"</td></tr> <tr> <td></td><td></td><td>12498</td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Metric</u>	<u>Plug Style</u>	<u>1-7/16" Hexagon</u>	14 mm - 1.25 mm	2449*	6949	14 mm - 1.50 mm	1750	6950	14 mm - 2.00 mm	1752	6952	16 mm - 1.50 mm	1755	6955	16 mm - 2.00 mm	1756	6956	18 mm - 1.50 mm	1759	6959	18 mm - 2.50 mm	1761	6961			<u>1-13/16" Hexagon</u>	20 mm - 2.50 mm	1764	8564	22 mm - 1.50 mm	1765	8565	24 mm - 2.00 mm	1768	8568	24 mm - 3.00 mm	1769	8569			<u>Threading Tools</u>			<u>Stock #</u>			Adj. Die Stock - 1-7/16" Hexagon Dies			12436			Adj. Die Stock - 1-13/16" Hexagon Dies			12446			Adj. Handle Tap Wrench - Taps 1/4" to 1"			12498	
Thread Size	Tap Stock #	Die Stock #																																																																		
<u>Metric</u>	<u>Plug Style</u>	<u>1-7/16" Hexagon</u>																																																																		
14 mm - 1.25 mm	2449*	6949																																																																		
14 mm - 1.50 mm	1750	6950																																																																		
14 mm - 2.00 mm	1752	6952																																																																		
16 mm - 1.50 mm	1755	6955																																																																		
16 mm - 2.00 mm	1756	6956																																																																		
18 mm - 1.50 mm	1759	6959																																																																		
18 mm - 2.50 mm	1761	6961																																																																		
		<u>1-13/16" Hexagon</u>																																																																		
20 mm - 2.50 mm	1764	8564																																																																		
22 mm - 1.50 mm	1765	8565																																																																		
24 mm - 2.00 mm	1768	8568																																																																		
24 mm - 3.00 mm	1769	8569																																																																		
		<u>Threading Tools</u>																																																																		
		<u>Stock #</u>																																																																		
		Adj. Die Stock - 1-7/16" Hexagon Dies																																																																		
		12436																																																																		
		Adj. Die Stock - 1-13/16" Hexagon Dies																																																																		
		12446																																																																		
		Adj. Handle Tap Wrench - Taps 1/4" to 1"																																																																		
		12498																																																																		

Empty Plastic Case for 97311

97311MT

\* Spark plug tap

- Plastic storage case



97311

## High Carbon Steel Tap and Hexagon Die Set

Description	Contents	Stock #																																																												
24 pc Set	Fractional Sizes 1/4" to 1/2"	24614																																																												
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Fractional</u></td><td><u>Plug Style</u></td><td><u>1" Hexagon</u></td></tr> <tr> <td>1/4" - 20 NC</td><td>1420</td><td>6520</td></tr> <tr> <td>1/4" - 28 NF</td><td>1423</td><td>6523</td></tr> <tr> <td>5/16" - 18 NC</td><td>1427</td><td>6527</td></tr> <tr> <td>5/16" - 24 NF</td><td>1429</td><td>6529</td></tr> <tr> <td>3/8" - 16 NC</td><td>1434</td><td>6534</td></tr> <tr> <td>3/8" - 24 NF</td><td>1436</td><td>6536</td></tr> <tr> <td>7/16" - 14 NC</td><td>1439</td><td>6539</td></tr> <tr> <td>7/16" - 20 NF</td><td>1440</td><td>6540</td></tr> <tr> <td>1/2" - 13 NC</td><td>1444</td><td>6544</td></tr> <tr> <td>1/2" - 20 NF</td><td>1445</td><td>6545</td></tr> <tr> <td><u>Pipe</u></td><td></td><td></td></tr> <tr> <td>1/8" - 27 NPT</td><td>1902</td><td>6702</td></tr> <tr> <td></td><td></td><td><u>Threading Tools</u></td></tr> <tr> <td></td><td></td><td><u>Stock #</u></td></tr> <tr> <td></td><td></td><td>Plain Die Stock - 1" Hexagon Dies</td></tr> <tr> <td></td><td></td><td>11008</td></tr> <tr> <td></td><td></td><td>Offset Adj. Tap Wrench - Taps No. 0 to 1/2"</td></tr> <tr> <td></td><td></td><td>12421</td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Fractional</u>	<u>Plug Style</u>	<u>1" Hexagon</u>	1/4" - 20 NC	1420	6520	1/4" - 28 NF	1423	6523	5/16" - 18 NC	1427	6527	5/16" - 24 NF	1429	6529	3/8" - 16 NC	1434	6534	3/8" - 24 NF	1436	6536	7/16" - 14 NC	1439	6539	7/16" - 20 NF	1440	6540	1/2" - 13 NC	1444	6544	1/2" - 20 NF	1445	6545	<u>Pipe</u>			1/8" - 27 NPT	1902	6702			<u>Threading Tools</u>			<u>Stock #</u>			Plain Die Stock - 1" Hexagon Dies			11008			Offset Adj. Tap Wrench - Taps No. 0 to 1/2"			12421	
Thread Size	Tap Stock #	Die Stock #																																																												
<u>Fractional</u>	<u>Plug Style</u>	<u>1" Hexagon</u>																																																												
1/4" - 20 NC	1420	6520																																																												
1/4" - 28 NF	1423	6523																																																												
5/16" - 18 NC	1427	6527																																																												
5/16" - 24 NF	1429	6529																																																												
3/8" - 16 NC	1434	6534																																																												
3/8" - 24 NF	1436	6536																																																												
7/16" - 14 NC	1439	6539																																																												
7/16" - 20 NF	1440	6540																																																												
1/2" - 13 NC	1444	6544																																																												
1/2" - 20 NF	1445	6545																																																												
<u>Pipe</u>																																																														
1/8" - 27 NPT	1902	6702																																																												
		<u>Threading Tools</u>																																																												
		<u>Stock #</u>																																																												
		Plain Die Stock - 1" Hexagon Dies																																																												
		11008																																																												
		Offset Adj. Tap Wrench - Taps No. 0 to 1/2"																																																												
		12421																																																												

- Plastic storage case



24614

Taps, Dies and Screw Extractors

# HANSON® TAP AND DIE SETS

## High Carbon Steel Tap and Solid Round Die Set

- Plastic storage case



23622

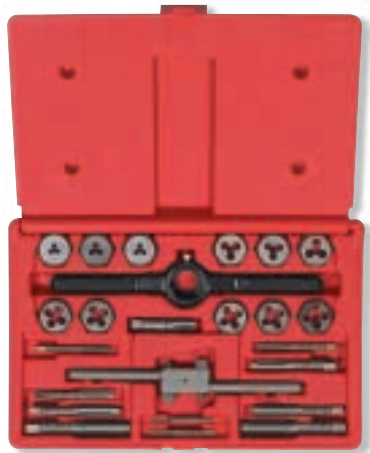
Description	Contents		Stock #
24 pc Set	Fractional Sizes 1/4" to 1/2"		23622
	Thread Size	Tap Stock #	Die Stock #
	<u>Fractional</u>	<u>Plug Style</u>	<u>1" Solid Round</u>
	1/4" - 20 NC	1420	3120
	1/4" - 28 NF	1423	3123
	5/16" - 18 NC	1427	3127
	5/16" - 24 NF	1429	3129
	3/8" - 16 NC	1434	3134
	3/8" - 24 NF	1436	3136
	7/16" - 14 NC	1439	3139
	7/16" - 20 NF	1440	3140
	1/2" - 13 NC	1444	3144
	1/2" - 20 NF	1445	3145
	<u>Pipe</u>		
	1/8" - 27 NPT	1902	3202
	<u>Threading Tools</u>		<u>Stock #</u>
	Plain Die Stock - 1" Hexagon Dies		11008
	Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421

Empty Plastic Case for 23622

23622MT

## Metric Tap and Hexagon Die Set

- Plastic storage case



26313

Description	Contents		Stock #
24 pc Set	Metric Sizes 3 mm to 12 mm		26313
	Thread Size	Tap Stock #	Die Stock #
	<u>Metric</u>	<u>Plug Style</u>	<u>1" Hexagon</u>
	3 mm - 0.50	1712	6612
	4 mm - 0.70	1717	6617
	5 mm - 0.80	1722	6622
	6 mm - 1.00	1727	6627
	7 mm - 1.00	1731	6631
	8 mm - 1.25	1734	6634
	9 mm - 1.25	1737	6637
	10 mm - 1.50	1740	6640
	12 mm - 1.50	1743	6643
	12 mm - 1.75	1744	6644
	<u>Pipe</u>		
	1/8" - 28 BSP	1911	6711
	<u>Threading Tools</u>		<u>Stock #</u>
	Plain Die Stock - 1" Hexagon Dies		11008
	Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421

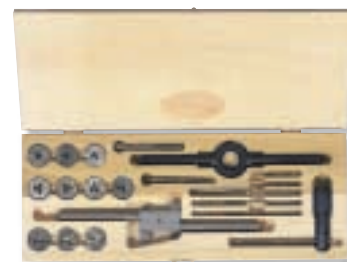


# HANSON® TAP AND DIE SETS

## Machine Screw Tap and Adjustable Round Die Set

Description	Contents	Stock #																																																
23 pc Set	Machine Screw Sizes No. 0 to No. 12	25923																																																
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Machine Screw</u></td><td><u>Plug Style</u></td><td><u>13/16" Adj. Round</u></td></tr> <tr> <td>0 - 80 NF</td><td>1102</td><td>3502</td></tr> <tr> <td>1 - 64 NC</td><td>1104</td><td>3504</td></tr> <tr> <td>2 - 56 NC</td><td>1106</td><td>3506</td></tr> <tr> <td>3 - 48 NC</td><td>1108</td><td>3508</td></tr> <tr> <td>4 - 40 NC</td><td>1112</td><td>3512</td></tr> <tr> <td>5 - 40 NC</td><td>1116</td><td>3516</td></tr> <tr> <td>6 - 32 NC</td><td>1118</td><td>3518</td></tr> <tr> <td>8 - 32 NC</td><td>1124</td><td>3524</td></tr> <tr> <td>10 - 24 NC</td><td>1128</td><td>3528</td></tr> <tr> <td>12 - 24 NC</td><td>1132</td><td>3532</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Plain Die Stock - 13/16" Adj. Round Dies</td><td></td><td>12416</td></tr> <tr> <td>Offset Adj. Tap Wrench - Taps No. 0 to 1/2"</td><td></td><td>12421</td></tr> <tr> <td>T-Handle Wrench - Taps No. 0 to 1/4"</td><td></td><td>12401</td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Machine Screw</u>	<u>Plug Style</u>	<u>13/16" Adj. Round</u>	0 - 80 NF	1102	3502	1 - 64 NC	1104	3504	2 - 56 NC	1106	3506	3 - 48 NC	1108	3508	4 - 40 NC	1112	3512	5 - 40 NC	1116	3516	6 - 32 NC	1118	3518	8 - 32 NC	1124	3524	10 - 24 NC	1128	3528	12 - 24 NC	1132	3532	<u>Threading Tools</u>		<u>Stock #</u>	Plain Die Stock - 13/16" Adj. Round Dies		12416	Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421	T-Handle Wrench - Taps No. 0 to 1/4"		12401	
Thread Size	Tap Stock #	Die Stock #																																																
<u>Machine Screw</u>	<u>Plug Style</u>	<u>13/16" Adj. Round</u>																																																
0 - 80 NF	1102	3502																																																
1 - 64 NC	1104	3504																																																
2 - 56 NC	1106	3506																																																
3 - 48 NC	1108	3508																																																
4 - 40 NC	1112	3512																																																
5 - 40 NC	1116	3516																																																
6 - 32 NC	1118	3518																																																
8 - 32 NC	1124	3524																																																
10 - 24 NC	1128	3528																																																
12 - 24 NC	1132	3532																																																
<u>Threading Tools</u>		<u>Stock #</u>																																																
Plain Die Stock - 13/16" Adj. Round Dies		12416																																																
Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421																																																
T-Handle Wrench - Taps No. 0 to 1/4"		12401																																																

- Wooden storage case



25923

Empty Wooden Case for 25923

25923MT

## Fractional Tap and Adjustable Round Die Set

Description	Contents	Stock #																																													
22 pc Set	Fractional Sizes 9/16" to 1"	25922																																													
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Fractional</u></td><td><u>Plug Style</u></td><td><u>2" Adj. Round</u></td></tr> <tr> <td>9/16" - 12 NC</td><td>1448</td><td>4248</td></tr> <tr> <td>9/16" - 18 NF</td><td>1449</td><td>4249</td></tr> <tr> <td>5/8" - 11 NC</td><td>1452</td><td>4252</td></tr> <tr> <td>5/8" - 18 NF</td><td>1454</td><td>4254</td></tr> <tr> <td>3/4" - 10 NC</td><td>1458</td><td>4258</td></tr> <tr> <td>3/4" - 16 NF</td><td>1460</td><td>4260</td></tr> <tr> <td>7/8" - 9 NC</td><td>1461</td><td>4261</td></tr> <tr> <td>7/8" - 14 NF</td><td>1463</td><td>4263</td></tr> <tr> <td>1" - 8 NC</td><td>1465</td><td>4265</td></tr> <tr> <td>1" - 12 NF</td><td>1466</td><td>4266</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adj. Die Stock - 2" Adj. Round Dies</td><td></td><td>12455</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps 1/4" to 1"</td><td></td><td>12498</td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Fractional</u>	<u>Plug Style</u>	<u>2" Adj. Round</u>	9/16" - 12 NC	1448	4248	9/16" - 18 NF	1449	4249	5/8" - 11 NC	1452	4252	5/8" - 18 NF	1454	4254	3/4" - 10 NC	1458	4258	3/4" - 16 NF	1460	4260	7/8" - 9 NC	1461	4261	7/8" - 14 NF	1463	4263	1" - 8 NC	1465	4265	1" - 12 NF	1466	4266	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 2" Adj. Round Dies		12455	Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	
Thread Size	Tap Stock #	Die Stock #																																													
<u>Fractional</u>	<u>Plug Style</u>	<u>2" Adj. Round</u>																																													
9/16" - 12 NC	1448	4248																																													
9/16" - 18 NF	1449	4249																																													
5/8" - 11 NC	1452	4252																																													
5/8" - 18 NF	1454	4254																																													
3/4" - 10 NC	1458	4258																																													
3/4" - 16 NF	1460	4260																																													
7/8" - 9 NC	1461	4261																																													
7/8" - 14 NF	1463	4263																																													
1" - 8 NC	1465	4265																																													
1" - 12 NF	1466	4266																																													
<u>Threading Tools</u>		<u>Stock #</u>																																													
Adj. Die Stock - 2" Adj. Round Dies		12455																																													
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498																																													

- Wooden storage case



25922

Empty Wooden Case for 25922

25922MT

Taps, Dies and Screw Extractors

# HANSON® TAP AND DIE SETS

## High Carbon Steel Tap and Adjustable Round Die Set

- Wooden storage case



25926

Description	Contents	Stock #
21 pc Set	Fractional Sizes 1/4" to 3/4"	25926
	Thread Size	Tap Stock #
	<u>Fractional</u>	<u>Plug Style</u>
	1/4" - 20 NC	1420
	5/16" - 18 NC	1427
	3/8" - 16 NC	1434
	7/16" - 14 NC	1439
	1/2" - 13 NC	1444
	9/16" - 12 NC	1448
	5/8" - 11 NC	1452
	3/4" - 10 NC	1458
	<u>Threading Tools</u>	<u>Stock #</u>
	Adj. Die Stock - 1-1/2" Adj. Round Dies	12435
	Adj. Handle Tap Wrench - Taps 1/4" to 1"	12498
	T-Handle Tap Wrench - Tap 1/4" to 1/2"	12402
	18 Leaf Standard Thread Gauge	11018
	Screwdriver	

Empty Wooden Case for 25926

25926MT

## Fractional Tap and Hexagon Die "Best 8" Set

- Contains the eight best selling taps and dies
- Plastic storage case keeps tools organized
- Set contains; general purpose plug taps, hexagon dies and the appropriate threading tools



24608

Description	Contents	Carded Stock #
18 pc Set	Top 8 Machine Screw and Fractional Sizes	24608
	Thread Size	Tap Stock #
	<u>Machine Screw</u>	<u>Plug Style</u>
	6 - 32 NC	1118
	8 - 32 NC	1124
	10 - 24 NC	1128
	10 - 32 NF	1131
	<u>Fractional</u>	
	1/4" - 20 NC	1420
	5/16" - 18 NC	1427
	3/8" - 16 NC	1434
	1/2" - 13 NC	1444
	<u>Threading Tools</u>	<u>Stock #</u>
	Plain Die Stock - 1" Hexagon Dies	11008
	Offset Adj. Tap Wrench - Taps No. 0 to 1/2"	12421

18 pc Set      Top 8 Machine Screw and Fractional Sizes (in vinyl pouch)      24618

Empty Plastic Case for 24618

24618MT

# HANSON® TAP AND DIE SETS

## Metric Tap and Hexagon "Best 8" Set

Description	Contents	Carded Stock #																																							
18 pc Set	Top 8 Metric Sizes	24609																																							
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <th>Metric</th><th>Plug Style</th><th>1" Hexagon</th></tr> <tr> <td>3 mm - 0.50</td><td>1712</td><td>6612</td></tr> <tr> <td>4 mm - 0.70</td><td>1717</td><td>6617</td></tr> <tr> <td>5 mm - 0.80</td><td>1722</td><td>6622</td></tr> <tr> <td>5 mm - 0.90</td><td>1723</td><td>6623</td></tr> <tr> <td>6 mm - 1.00</td><td>1727</td><td>6627</td></tr> <tr> <td>8 mm - 1.25</td><td>1734</td><td>6634</td></tr> <tr> <td>10 mm - 1.50</td><td>1740</td><td>6640</td></tr> <tr> <td>12 mm - 1.75</td><td>1744</td><td>6644</td></tr> <tr> <td colspan="2"><u>Threading Tools</u></td><td><u>Stock #</u></td></tr> <tr> <td colspan="2">Plain Die Stock - 1" Hexagon Dies</td><td>11008</td></tr> <tr> <td colspan="2">Offset Adj. Tap Wrench - Taps 3 to 12 mm</td><td>12421</td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	Metric	Plug Style	1" Hexagon	3 mm - 0.50	1712	6612	4 mm - 0.70	1717	6617	5 mm - 0.80	1722	6622	5 mm - 0.90	1723	6623	6 mm - 1.00	1727	6627	8 mm - 1.25	1734	6634	10 mm - 1.50	1740	6640	12 mm - 1.75	1744	6644	<u>Threading Tools</u>		<u>Stock #</u>	Plain Die Stock - 1" Hexagon Dies		11008	Offset Adj. Tap Wrench - Taps 3 to 12 mm		12421	
Thread Size	Tap Stock #	Die Stock #																																							
Metric	Plug Style	1" Hexagon																																							
3 mm - 0.50	1712	6612																																							
4 mm - 0.70	1717	6617																																							
5 mm - 0.80	1722	6622																																							
5 mm - 0.90	1723	6623																																							
6 mm - 1.00	1727	6627																																							
8 mm - 1.25	1734	6634																																							
10 mm - 1.50	1740	6640																																							
12 mm - 1.75	1744	6644																																							
<u>Threading Tools</u>		<u>Stock #</u>																																							
Plain Die Stock - 1" Hexagon Dies		11008																																							
Offset Adj. Tap Wrench - Taps 3 to 12 mm		12421																																							

- Contains the eight best selling metric taps and dies
- Plastic storage case keeps tools organized
- Set contains; general purpose plug taps, hexagon dies and the appropriate threading tools



24609

## Fractional Tap and Hexagon Die "Best 5" Set

Description	Contents	Carded Stock #																																	
12 pc Set	Home Threading Kit	24605																																	
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <th>Machine Screw</th><th>Plug Style</th><th>5/8" Hexagon</th></tr> <tr> <td>6 - 32 NC</td><td>1118</td><td>6118</td></tr> <tr> <td>8 - 32 NC</td><td>1124</td><td>6124</td></tr> <tr> <td>10 - 24 NC</td><td>1128</td><td>6128</td></tr> <tr> <td>10 - 32 NF</td><td>1131</td><td>6131</td></tr> <tr> <td colspan="2"><u>Fractional</u></td><td></td></tr> <tr> <td>1/4" - 20 NC</td><td>1420</td><td>6220</td></tr> <tr> <td colspan="2"><u>Threading Tools</u></td><td><u>Stock #</u></td></tr> <tr> <td colspan="2">Plain Die Stock - 5/8" Hexagon Dies</td><td>12457</td></tr> <tr> <td colspan="2">T-Handle Tap Wrench - Tap No. 0 to 1/4"</td><td>12401</td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	Machine Screw	Plug Style	5/8" Hexagon	6 - 32 NC	1118	6118	8 - 32 NC	1124	6124	10 - 24 NC	1128	6128	10 - 32 NF	1131	6131	<u>Fractional</u>			1/4" - 20 NC	1420	6220	<u>Threading Tools</u>		<u>Stock #</u>	Plain Die Stock - 5/8" Hexagon Dies		12457	T-Handle Tap Wrench - Tap No. 0 to 1/4"		12401	
Thread Size	Tap Stock #	Die Stock #																																	
Machine Screw	Plug Style	5/8" Hexagon																																	
6 - 32 NC	1118	6118																																	
8 - 32 NC	1124	6124																																	
10 - 24 NC	1128	6128																																	
10 - 32 NF	1131	6131																																	
<u>Fractional</u>																																			
1/4" - 20 NC	1420	6220																																	
<u>Threading Tools</u>		<u>Stock #</u>																																	
Plain Die Stock - 5/8" Hexagon Dies		12457																																	
T-Handle Tap Wrench - Tap No. 0 to 1/4"		12401																																	

- Carded set
- Top 5 machine screw and fractional sizes



24605

## Metric Tap and Hexagon "Best 5" Set

Description	Contents	Carded Stock #																														
12 pc Set	Top 5 Metric Sizes	24604																														
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <th>Metric</th><th>Plug Style</th><th>5/8" Hexagon</th></tr> <tr> <td>3 mm - 0.50</td><td>1712</td><td>6312</td></tr> <tr> <td>4 mm - 0.70</td><td>1717</td><td>6317</td></tr> <tr> <td>5 mm - 0.80</td><td>1722</td><td>6322</td></tr> <tr> <td>5 mm - 0.90</td><td>1723</td><td>6323</td></tr> <tr> <td>6 mm - 1.00</td><td>1727</td><td>6327</td></tr> <tr> <td colspan="2"><u>Threading Tools</u></td><td><u>Stock #</u></td></tr> <tr> <td colspan="2">Plain Die Stock - 5/8" Hexagon Dies</td><td>12457</td></tr> <tr> <td colspan="2">Offset Adj. Tap Wrench - Taps 3 to 12 mm</td><td>12401</td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	Metric	Plug Style	5/8" Hexagon	3 mm - 0.50	1712	6312	4 mm - 0.70	1717	6317	5 mm - 0.80	1722	6322	5 mm - 0.90	1723	6323	6 mm - 1.00	1727	6327	<u>Threading Tools</u>		<u>Stock #</u>	Plain Die Stock - 5/8" Hexagon Dies		12457	Offset Adj. Tap Wrench - Taps 3 to 12 mm		12401	
Thread Size	Tap Stock #	Die Stock #																														
Metric	Plug Style	5/8" Hexagon																														
3 mm - 0.50	1712	6312																														
4 mm - 0.70	1717	6317																														
5 mm - 0.80	1722	6322																														
5 mm - 0.90	1723	6323																														
6 mm - 1.00	1727	6327																														
<u>Threading Tools</u>		<u>Stock #</u>																														
Plain Die Stock - 5/8" Hexagon Dies		12457																														
Offset Adj. Tap Wrench - Taps 3 to 12 mm		12401																														

- Carded set
- Top 5 metric sizes



24604

# HANSON® TAP AND DIE SETS

## High Carbon Steel Tap and Adjustable Round Die Set

- Wooden storage case



25915

Description	Contents			Stock #
15 pc Set	Machine Screw Sizes No. 4 to No. 12			25915
	Thread Size	Tap Stock #	Die Stock #	
	<u>Machine Screw</u>	<u>Plug Style</u>	<u>13/16" Adj. Round</u>	
	4 - 36 NS	1111	3511	
	6 - 32 NC	1118	3518	
	8 - 32 NC	1124	3524	
	10 - 24 NC	1128	3528	
	10 - 32 NF	1131	3531	
	12 - 24 NC	1132	3532	
	<u>Threading Tools</u>		<u>Stock #</u>	
	Plain Die Stock - 13/16" Round Dies		12416	
	Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421	
	T-Handle Tap Wrench - Tap No. 0 to 1/4"		12401	

Empty Wooden Case for 25915

25915MT

## High Carbon Steel Tap and Hexagon Die Set

- Plastic storage case



24612

Description	Contents			Stock #
12 pc Set	Fractional Sizes 1/4" to 1/2"			24612
	Thread Size	Tap Stock #	Die Stock #	
	<u>Fractional</u>	<u>Plug Style</u>	<u>1" Hexagon</u>	
	1/4" - 20 NC	1420	6520	
	5/16" - 18 NC	1427	6527	
	3/8" - 16 NC	1434	6534	
	7/16" - 14 NC	1439	6539	
	1/2" - 13 NC	1444	6544	
	<u>Threading Tools</u>		<u>Stock #</u>	
	Plain Die Stock - 1" Hexagon Dies		11008	
	Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421	

Empty Plastic Case for 24612

24612MT

## High Carbon Steel Tap and Solid Round Die Set

- Plastic storage case



23612

Description	Contents			Stock #
12 pc Set	Fractional Sizes 1/4" to 1/2"			23612
	Thread Size	Tap Stock #	Die Stock #	
	<u>Fractional</u>	<u>Plug Style</u>	<u>1" Solid Round</u>	
	1/4" - 20 NC	1420	3120	
	5/16" - 18 NC	1427	3127	
	3/8" - 16 NC	1434	3134	
	7/16" - 14 NC	1439	3139	
	1/2" - 13 NC	1444	3144	
	<u>Threading Tools</u>		<u>Stock #</u>	
	Plain Die Stock - 1" Round Dies		11008	
	Offset Adj. Tap Wrench - Taps No. 0 to 1/2"		12421	

# HANSON® TAP AND DIE SETS

## High Speed Steel Cut Thread Tap and Adjustable Die Super Set

Description	Contents	Stock #																																																																														
41 pc Set	Fractional Sizes 1/4" to 3/4"	543715																																																																														
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Fractional</u></td><td><u>Plug Style</u></td><td><u>1-1/2" Adj. Round</u></td></tr> <tr> <td>1/4" - 20 NC</td><td>413010</td><td>503038</td></tr> <tr> <td>1/4" - 28 NF</td><td>413012</td><td>503039</td></tr> <tr> <td>5/16" - 18 NC</td><td>413015</td><td>503041</td></tr> <tr> <td>5/16" - 24 NF</td><td>413016</td><td>503042</td></tr> <tr> <td>3/8" - 16 NC</td><td>413018</td><td>503044</td></tr> <tr> <td>3/8" - 24 NF</td><td>413019</td><td>503045</td></tr> <tr> <td>7/16" - NC</td><td>413020</td><td>503046</td></tr> <tr> <td>7/16" - 20 NF</td><td>413021</td><td>503047</td></tr> <tr> <td>1/2" - 13 NC</td><td>413022</td><td>503048</td></tr> <tr> <td>1/2" - 20 NF</td><td>413023</td><td>503049</td></tr> <tr> <td>9/16" - 12 NC</td><td>413024</td><td>503051</td></tr> <tr> <td>9/16" - 18 NF</td><td>413025</td><td>503052</td></tr> <tr> <td>5/8" - 11 NC</td><td>413026</td><td>503053</td></tr> <tr> <td>5/8" - 18 NF</td><td>413027</td><td>503054</td></tr> <tr> <td>3/4" - 10 NC</td><td>413028</td><td>503057</td></tr> <tr> <td>3/4" - 16 NF</td><td>413029</td><td>503058</td></tr> <tr> <td>1/8" - 27 NPT</td><td>459001</td><td>503102</td></tr> <tr> <td>1/4" - 18 NPT</td><td>459002</td><td>503101</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adj. Die Stock - 1-1/2" Round Dies</td><td></td><td>12435</td></tr> <tr> <td>T-Handle Wrench - Taps 1/4" to 1/2"</td><td></td><td>12402</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps 1/4" to 1"</td><td></td><td>12498</td></tr> <tr> <td>18 Leaf Standard Thread Gauge</td><td></td><td>11018</td></tr> <tr> <td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Fractional</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>	1/4" - 20 NC	413010	503038	1/4" - 28 NF	413012	503039	5/16" - 18 NC	413015	503041	5/16" - 24 NF	413016	503042	3/8" - 16 NC	413018	503044	3/8" - 24 NF	413019	503045	7/16" - NC	413020	503046	7/16" - 20 NF	413021	503047	1/2" - 13 NC	413022	503048	1/2" - 20 NF	413023	503049	9/16" - 12 NC	413024	503051	9/16" - 18 NF	413025	503052	5/8" - 11 NC	413026	503053	5/8" - 18 NF	413027	503054	3/4" - 10 NC	413028	503057	3/4" - 16 NF	413029	503058	1/8" - 27 NPT	459001	503102	1/4" - 18 NPT	459002	503101	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1-1/2" Round Dies		12435	T-Handle Wrench - Taps 1/4" to 1/2"		12402	Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	18 Leaf Standard Thread Gauge		11018	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																																														
<u>Fractional</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>																																																																														
1/4" - 20 NC	413010	503038																																																																														
1/4" - 28 NF	413012	503039																																																																														
5/16" - 18 NC	413015	503041																																																																														
5/16" - 24 NF	413016	503042																																																																														
3/8" - 16 NC	413018	503044																																																																														
3/8" - 24 NF	413019	503045																																																																														
7/16" - NC	413020	503046																																																																														
7/16" - 20 NF	413021	503047																																																																														
1/2" - 13 NC	413022	503048																																																																														
1/2" - 20 NF	413023	503049																																																																														
9/16" - 12 NC	413024	503051																																																																														
9/16" - 18 NF	413025	503052																																																																														
5/8" - 11 NC	413026	503053																																																																														
5/8" - 18 NF	413027	503054																																																																														
3/4" - 10 NC	413028	503057																																																																														
3/4" - 16 NF	413029	503058																																																																														
1/8" - 27 NPT	459001	503102																																																																														
1/4" - 18 NPT	459002	503101																																																																														
<u>Threading Tools</u>		<u>Stock #</u>																																																																														
Adj. Die Stock - 1-1/2" Round Dies		12435																																																																														
T-Handle Wrench - Taps 1/4" to 1/2"		12402																																																																														
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498																																																																														
18 Leaf Standard Thread Gauge		11018																																																																														
Screwdriver																																																																																

- Plastic storage case



543715



# HANSON® TAP AND DIE SETS

## High Speed Steel Cut Thread Tap and Adjustable Round Die Super Set

- Plastic storage case



541614

Description	Contents	Stock #																																																																																	
39 pc Set	Machine Screw and Fractional Sizes No. 4 to 1/2"	541614																																																																																	
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Machine Screw</u></td><td><u>Plug Style</u></td><td><u>1" Adj. Round</u></td></tr> <tr> <td>4 - 40 NC</td><td>403009</td><td>502009</td></tr> <tr> <td>6 - 32 NC</td><td>403015</td><td>502014</td></tr> <tr> <td>8 - 32 NC</td><td>403019</td><td>502018</td></tr> <tr> <td>10 - 24 NC</td><td>403022</td><td>502021</td></tr> <tr> <td>10 - 32 NF</td><td>403023</td><td>502022</td></tr> <tr> <td>12 - 24 NC</td><td>403025</td><td>502024</td></tr> <tr> <td><u>Fractional</u></td><td></td><td></td></tr> <tr> <td>1/4" - 20 NC</td><td>413010</td><td>502038</td></tr> <tr> <td>1/4" - 28 NF</td><td>413012</td><td>502039</td></tr> <tr> <td>5/16" - 18 NC</td><td>413015</td><td>502041</td></tr> <tr> <td>5/16" - 24 NF</td><td>413016</td><td>502042</td></tr> <tr> <td>3/8" - 16 NC</td><td>413018</td><td>502044</td></tr> <tr> <td>3/8" - 24 NF</td><td>413019</td><td>502045</td></tr> <tr> <td>7/16" - 14 NC</td><td>413020</td><td>502046</td></tr> <tr> <td>7/16" - 20 NF</td><td>413021</td><td>502047</td></tr> <tr> <td>1/2" - 13 NC</td><td>413022</td><td>502048</td></tr> <tr> <td>1/2" - 20 NF</td><td>413023</td><td>502049</td></tr> <tr> <td><u>Pipe</u></td><td></td><td></td></tr> <tr> <td>1/8" - 27 NPT</td><td>459001</td><td>502101</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adjustable Die Stock - 1" Adj. Round Dies</td><td></td><td>12428</td></tr> <tr> <td>T-Handle Wrench - Taps No. 0 to 1/4"</td><td></td><td>12401</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps No. 0 to 1/2"</td><td></td><td>311088</td></tr> <tr> <td>18 Leaf Standard Thread Pitch Gauge</td><td></td><td>11018</td></tr> <tr> <td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Machine Screw</u>	<u>Plug Style</u>	<u>1" Adj. Round</u>	4 - 40 NC	403009	502009	6 - 32 NC	403015	502014	8 - 32 NC	403019	502018	10 - 24 NC	403022	502021	10 - 32 NF	403023	502022	12 - 24 NC	403025	502024	<u>Fractional</u>			1/4" - 20 NC	413010	502038	1/4" - 28 NF	413012	502039	5/16" - 18 NC	413015	502041	5/16" - 24 NF	413016	502042	3/8" - 16 NC	413018	502044	3/8" - 24 NF	413019	502045	7/16" - 14 NC	413020	502046	7/16" - 20 NF	413021	502047	1/2" - 13 NC	413022	502048	1/2" - 20 NF	413023	502049	<u>Pipe</u>			1/8" - 27 NPT	459001	502101	<u>Threading Tools</u>		<u>Stock #</u>	Adjustable Die Stock - 1" Adj. Round Dies		12428	T-Handle Wrench - Taps No. 0 to 1/4"		12401	Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088	18 Leaf Standard Thread Pitch Gauge		11018	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																																																	
<u>Machine Screw</u>	<u>Plug Style</u>	<u>1" Adj. Round</u>																																																																																	
4 - 40 NC	403009	502009																																																																																	
6 - 32 NC	403015	502014																																																																																	
8 - 32 NC	403019	502018																																																																																	
10 - 24 NC	403022	502021																																																																																	
10 - 32 NF	403023	502022																																																																																	
12 - 24 NC	403025	502024																																																																																	
<u>Fractional</u>																																																																																			
1/4" - 20 NC	413010	502038																																																																																	
1/4" - 28 NF	413012	502039																																																																																	
5/16" - 18 NC	413015	502041																																																																																	
5/16" - 24 NF	413016	502042																																																																																	
3/8" - 16 NC	413018	502044																																																																																	
3/8" - 24 NF	413019	502045																																																																																	
7/16" - 14 NC	413020	502046																																																																																	
7/16" - 20 NF	413021	502047																																																																																	
1/2" - 13 NC	413022	502048																																																																																	
1/2" - 20 NF	413023	502049																																																																																	
<u>Pipe</u>																																																																																			
1/8" - 27 NPT	459001	502101																																																																																	
<u>Threading Tools</u>		<u>Stock #</u>																																																																																	
Adjustable Die Stock - 1" Adj. Round Dies		12428																																																																																	
T-Handle Wrench - Taps No. 0 to 1/4"		12401																																																																																	
Adj. Handle Tap Wrench - Taps No. 0 to 1/2"		311088																																																																																	
18 Leaf Standard Thread Pitch Gauge		11018																																																																																	
Screwdriver																																																																																			

## High Speed Steel Cut Thread Tap and Adjustable Round Die Set

- Wooden storage case

Description	Contents	Stock #																																																
21 pc Set	Fractional Sizes 1/4" to 3/4"	553515																																																
	<table> <tr> <th>Thread Size</th><th>Tap Stock #</th><th>Die Stock #</th></tr> <tr> <td><u>Fractional</u></td><td><u>Plug Style</u></td><td><u>1-1/2" Adj. Round</u></td></tr> <tr> <td>1/4" - 20 NC</td><td>413010</td><td>503038</td></tr> <tr> <td>5/16" - 18 NC</td><td>413015</td><td>503041</td></tr> <tr> <td>3/8" - 16 NC</td><td>413018</td><td>503044</td></tr> <tr> <td>7/16" - 14 NC</td><td>413020</td><td>503046</td></tr> <tr> <td>1/2" - 13 NC</td><td>413022</td><td>503048</td></tr> <tr> <td>9/16" - 12 NC</td><td>413024</td><td>503051</td></tr> <tr> <td>5/8" - 11 NC</td><td>413026</td><td>503053</td></tr> <tr> <td>3/4" - 10 NC</td><td>413028</td><td>503057</td></tr> <tr> <td><u>Threading Tools</u></td><td></td><td><u>Stock #</u></td></tr> <tr> <td>Adj. Die Stock - 1-1/2" Adj. Round Dies</td><td></td><td>12435</td></tr> <tr> <td>Adj. Handle Tap Wrench - Taps 1/4" to 1"</td><td></td><td>12498</td></tr> <tr> <td>T-Handle Tap Wrench - Tap 1/4" to 1/2"</td><td></td><td>12402</td></tr> <tr> <td>18 Leaf Standard Thread Gauge</td><td></td><td>11018</td></tr> <tr> <td>Screwdriver</td><td></td><td></td></tr> </table>	Thread Size	Tap Stock #	Die Stock #	<u>Fractional</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>	1/4" - 20 NC	413010	503038	5/16" - 18 NC	413015	503041	3/8" - 16 NC	413018	503044	7/16" - 14 NC	413020	503046	1/2" - 13 NC	413022	503048	9/16" - 12 NC	413024	503051	5/8" - 11 NC	413026	503053	3/4" - 10 NC	413028	503057	<u>Threading Tools</u>		<u>Stock #</u>	Adj. Die Stock - 1-1/2" Adj. Round Dies		12435	Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498	T-Handle Tap Wrench - Tap 1/4" to 1/2"		12402	18 Leaf Standard Thread Gauge		11018	Screwdriver			
Thread Size	Tap Stock #	Die Stock #																																																
<u>Fractional</u>	<u>Plug Style</u>	<u>1-1/2" Adj. Round</u>																																																
1/4" - 20 NC	413010	503038																																																
5/16" - 18 NC	413015	503041																																																
3/8" - 16 NC	413018	503044																																																
7/16" - 14 NC	413020	503046																																																
1/2" - 13 NC	413022	503048																																																
9/16" - 12 NC	413024	503051																																																
5/8" - 11 NC	413026	503053																																																
3/4" - 10 NC	413028	503057																																																
<u>Threading Tools</u>		<u>Stock #</u>																																																
Adj. Die Stock - 1-1/2" Adj. Round Dies		12435																																																
Adj. Handle Tap Wrench - Taps 1/4" to 1"		12498																																																
T-Handle Tap Wrench - Tap 1/4" to 1/2"		12402																																																
18 Leaf Standard Thread Gauge		11018																																																
Screwdriver																																																		

# HANSON® SCREW EXTRACTORS

## Spiral Screw Extractor

### Material Construction

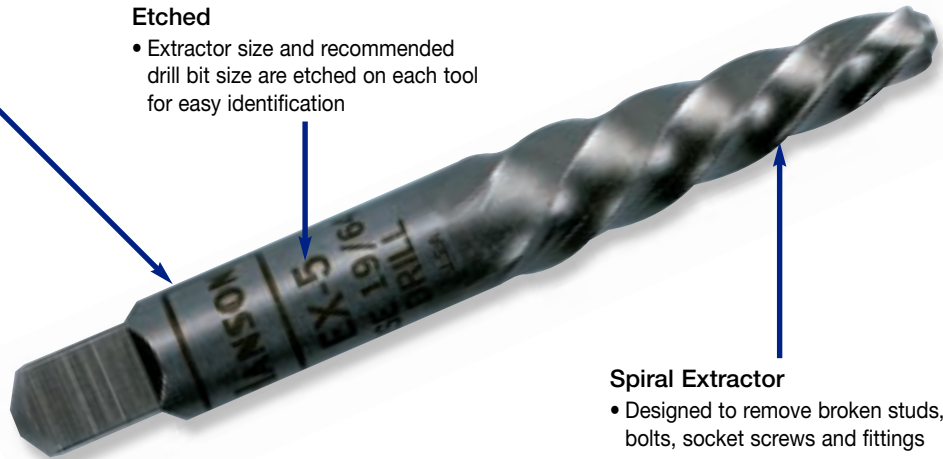
- Made from rugged, high carbon steel to handle the stress of removing broken bolts

### Etched

- Extractor size and recommended drill bit size are etched on each tool for easy identification

### Method of Use

- After drilling hole with either right or left handed drill bit, (left is recommended) insert extractor, turn counter clockwise
- Grips into sides of drill hole and removes broken part without damaging the threaded hole



### Spiral Extractor

- Designed to remove broken studs, bolts, socket screws and fittings
- Aggressive left hand spiral design for extra gripping power

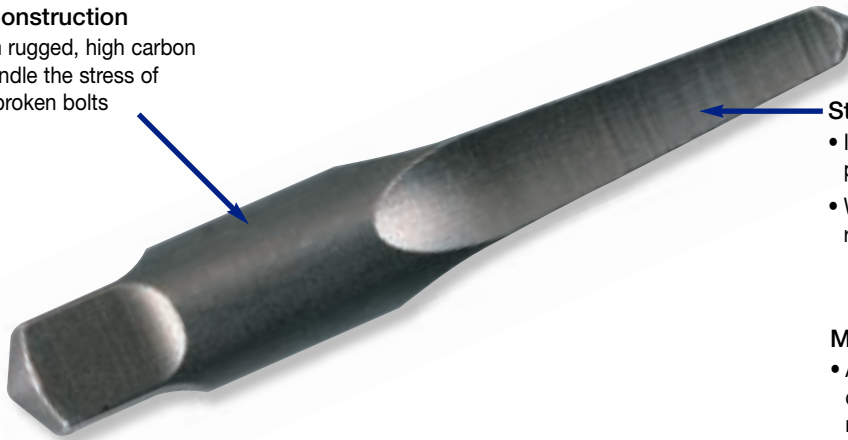
## Straight Screw Extractor

### Material Construction

- Made from rugged, high carbon steel to handle the stress of removing broken bolts

### Etched

- Extractor size and recommended drill bit size are etched on each tool for easy identification



### Straight Extractor

- Ideal for soft materials or thin-walled pieces such as pipe and fittings
- Will not expand soft material being removed resulting in easier removal

### Method of Use

- After drilling hole with either right or left handed drill bit, (left is recommended) insert extractor, turn counter clockwise
- Grips into sides of drill hole and removes broken part without damaging the threaded hole

## Multi-Spline Screw Extractor

### Hex Shank

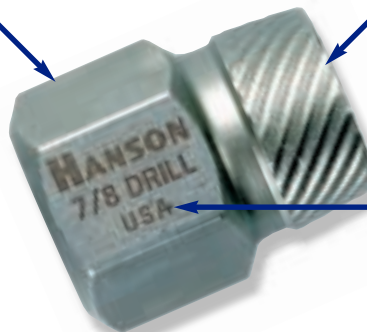
- Designed to be used with socket or flat wrenches

### Material Type

- Tough C4150 alloy steel construction

### Fine Knurl

- Designed for increased spline strength as well as maximum tool life



### Multi-Spline Extractor

- Designed to remove broken studs, bolts, socket screws, and fittings
- Aggressive left hand spiral design for extra gripping power
- Multi-spline design creates a greater gripping area for more torque

### Etched

- Extractor size and recommended drill bit size are etched on each tool for easy identification

# HANSON® SCREW EXTRACTORS

## Spiral Flute 534/524 Series

- Designed to remove broken studs, bolts, socket screws and fittings
- Aggressive left hand spiral design for extra gripping power



52405

Description	Use Drill Size	Removes Bolts and Screws	Carded Stock #	Bulk Stock #
EX - 1	5/64"	3/32" - 5/32", 2.5 mm - 4 mm, No. 3 - No. 6	53401	52401
EX - 2	7/64"	5/32" - 7/32", 4 mm - 6 mm, No. 6 - No. 12	53402	52402
EX - 3	5/32"	7/32" - 9/32", 6 mm - 8 mm, No. 12	53403	52403
EX - 4	1/4"	9/32" - 3/8" and 1/8" NPT, 1/8" BSP, 8 mm - 10 mm	53404	52404
EX - 5	19/64"	3/8" - 5/8" and 1/4" NPT, 1/4" BSP, 10 mm - 16 mm	53405	52405
EX - 6	13/32"	5/8" - 7/8" and 3/8" NPT, 3/8" BSP, 16 mm - 22 mm	53406	52406
EX - 7	17/32"	7/8" - 1-1/8" and 1/2" NPT, 1/2" BSP, 22 mm - 27 mm	53407	52407
EX - 8	13/16"	1-1/8" - 1-3/8" and 3/4" NPT, 3/4" BSP, 27 mm - 36 mm	-	52408
EX - 9	1-1/16"	1-3/8" - 2" and 1" NPT, 1" BSP, 36 mm - 52 mm	-	52409
EX - 10	1-15/16"	2-1/8" - 2-1/2" and 1-1/4" NPT, 1-1/4" BSP, 52 mm - 68 mm	-	52410

## Spiral Flute - 535/524 Series - Plastic Pouched Sets



53535

Description	Contents	Carded Stock #	Bulk Stock #
4 pc Set	EX-2 - EX-5	53425	52425
5 pc Set	EX-1 - EX-5	53535	52435
6 pc Set	EX-1 - EX-6	53545	52445
9 pc Set	EX-1 - EX-9	-	52490

## Straight Flute - 536/526 Series

- Will not expand material being removed resulting in easier removal



52605

Description	Use Drill Size	Removes Bolts and Screws	Carded Stock #	Bulk Stock #
ST - 1	9/64"	3/16" - 5/16", 5 mm - 8 mm, No. 10	53601	52601
ST - 2	3/16"	3/8", 10 mm	53602	52602
ST - 3	15/64"	7/16" and 1/8" NPT, 10 mm, 1/8" BSP	53603	52603
ST - 4	5/16"	1/2" - 9/16" and 1/4" NPT, 12 mm - 14 mm, 1/4" BSP	53604	52604
ST - 5	3/8"	5/8" and 3/8" NPT, 16 mm, 3/8" BSP	53605	52605
ST - 6	15/32"	3/4" and 1/2" NPT, 20 mm, 1/2" BSP	53606	52606
ST - 7	9/16"	7/8", 22 mm, 5/8" BSP	53607	52607

# HANSON® SCREW EXTRACTORS

## Straight Flute - 536/526 Series - Plastic Pouch Sets

Description	Contents	Carded Stock #	Bulk Stock #
4 pc Set	ST-2 - ST-5	53625	52625
5 pc Set	ST-1 - ST-5	53635	52635
6 pc Set	ST-1 - ST-6	53645	52655



52625

## Hex Head Multi-Spline - 522/532 Series

Description	Hex Head Size	Bolt Diameter	Drill Bit Diameter	Carded Stock #	Bulk Stock #
1/8"	1/2"	#12	1/8"	52201	53201
5/32"	1/2"	1/4"	5/32"	52202	53202
3/16"	1/2"	5/16"	3/16"	52203	53203
7/32"	1/2"	3/8"	7/32"	52204	53204
1/4"	1/2"	7/16"	1/4"	52205	53205
9/32"	1/2"	1/2"	9/32"	52206	53206
5/16"	1/2"	9/16"	5/16"	52207	53207
11/32"	1/2"	5/8"	11/32"	52208	53208
3/8"	1/2"	11/16"	3/8"	52209	53209
13/32"	1/2"	3/4"	13/32"	52210	53210
7/16"	5/8"	13/16"	7/16"	52211	53211
15/32"	5/8"	7/8"	15/32"	52212	53212
1/2"	5/8"	15/16"	1/2"	52213	53213
17/32"	3/4"	1"	17/32"	52214	53214
9/16"	3/4"	1-1/16"	9/16"	52215	53215
19/32"	3/4"	1-1/8"	19/32"	52216	53216
5/8"	3/4"	1-3/16"	5/8"	52217	53217
21/32"	7/8"	1-1/4"	21/32"	52218	53218
11/16"	7/8"	1-5/16"	11/16"	52219	53219
23/32"	7/8"	1-3/8"	23/32"	52220	53220
3/4"	7/8"	1-7/16"	3/4"	52221	53221
25/32"	1"	1-1/2"	25/32"	52222	53222
13/16"	1"	1-9/16"	13/16"	52223	53223
27/32"	1"	1-5/8"	27/32"	52224	53224
7/8"	1"	1-11/16"	7/8"	52225	53225

- Designed to remove broken studs, bolts, socket screws and fittings
- Aggressive left hand spiral design for extra gripping power



53225

Taps, Dies and Screw Extractors

## Hex Head Multi-Spline - 532 Series Plastic Case Sets

Description	Contents	Stock #
10 pc Set	1/8" through 13/32"	53226
Empty Plastic Case for 53226		53226MT
15 pc Set	1/8" through 9/16"	53228
Empty Plastic Case for 53228		53228MT
25 pc Set	1/8" through 7/8"	53227
Empty Plastic Case for 53227		53227MT



53226

# HANSON® SCREW EXTRACTORS

## Spiral Extractor and Drill Bit - 537 Series Combo Packs

- Extractor is packaged with the correct size drill bit to make removal easier
- High speed steel drill bit ensures fast, clean drilling



53704



53700



11117

Description		Contents		Pouched Stock #	Carded Stock #
EX - 1 + 5/64" Drill Bit				–	53701
EX - 2 + 7/64" Drill Bit				–	53702
EX - 3 + 5/32" Drill Bit				–	53703
EX - 4 + 1/4" Drill Bit				–	53704
EX - 5 + 19/64" Drill Bit				–	53705
EX - 6 + 13/32" Drill Bit				–	53706
6 pc Set		Extractor and HSS Drill Bit Set		53700	
		Spiral Flute			
		<u>Extractors</u>		<u>Drill Bits</u>	
		EX-1	52401	5/64"	60105
		EX-2	52402	7/64"	60107
		EX-3	52403	5/32"	60110
10 pc Set		Extractor and Cobalt Drill Bit Set in Vinyl Pouch		11117	
		Spiral Flute			
		<u>Extractors</u>		<u>Drill Bits</u>	
		EX-1	52401	5/64"	63105
		EX-2	52402	7/64"	63107
		EX-3	52403	5/32"	63110
		EX-4	52404	1/4"	63116
		EX-5	52405	19/64"	63119
10 pc Set		Extractor and Cobalt Drill Bit Set in Vinyl Pouch		11118	
		Straight Flute			
		<u>Extractors</u>		<u>Drill Bits</u>	
		ST-1	52601	9/64"	63109
		ST-2	52602	3/16"	63112
		ST-3	52603	15/64"	63115
		ST-4	52604	5/16"	63120
		ST-5	52605	3/8"	63124



# HANSON® SCREW EXTRACTORS

## Spiral Extractor and Drill Bit - 537 Series Combo Packs

Description	Contents	Stock #
10 pc Set	Extractor and Left Hand Cobalt in Metal Index Drill Bit Set	11119
	Spiral Flute	
	Extractors	Drill Bits
EX-1	52401	5/64" 30505
EX-2	52402	7/64" 30507
EX-3	52403	5/32" 30510
EX-4	52404	1/4" 30516
EX-5	52405	19/64" 30519
41 pc Set	Extractor and HSS Drill Bit Set in Vinyl Pouch	60151
	Spiral Flute	
	Extractors	Drill Bits
EX-1	52401	5/64" 60105
EX-2	52402	7/64" 60107
EX-3	52403	5/32" 60110
EX-4	52404	1/4" 60116
EX-5	52405	19/64" 60119
	Drill Bits	
No. 3	80103	5/16" 60120
No. 7	80107	21/64" 60121
No. 9	80109	3/8" 60124
No. 16	80116	25/64" 60125
No. 19	80119	13/32" 60126
No. 20	80120	27/64" 60127
No. 21	80121	29/64" 60129
No. 25	80125	B 40102
No. 29	80129	F 40106
No. 30	80130	H 40108
No. 36	80136	I 40109
No. 39	80139	J 40110D
No. 43	80143	O 40115
		Q 40117
		R 40118
		S 40119
		U 40121
		Z 40126



11119



60151

# HANSON® TAP & DRILL SELECTION CHART

Dia./Type	Dec. Equiv.	Recommended Fractional Tap	Recommended Machine Screw Tap	Recommended Metric Tap	Rec'd Screw Ext.	Dia./Type	Dec. Equiv.	Recommended Fractional Tap	Recommended Pipe Tap	Recommended Metric Tap	Rec'd Screw Ext.
1/64"	.0156					G	.2610				
1/32"	.0312					17/64"	.2656			8 mm - 1.25	
1.0 mm	.0394					H	.2660				
60	.0400					I	.2720	5/16" - 24 NF			
59	.0410					7.0 mm	.2756			8 mm - 1.00	
58	.0420					J	.2770			8 mm - 1.00	
57	.0430					K	.2810				
56	.0465					9/32"	.2812	5/16" - 32 NEF			
3/64"	.0469		0 - 80 NF			L	.2900				
55	.0520					M	.2950				
54	.0550					7.5 mm	.2953				
1.5 mm	.0591					19/64"	.2969				EX-5
53	.0595		1 - 64 NC, 1 - 72 NF			N	.3020			9 mm - 1.25	
1/16"	.0625					5/16"	.3125	3/8" - 16 NC			ST-4
52	.0635					8.0 mm	.3150			9 mm - 1.00	
51	.0670					O	.3160			9 mm - 1.00	
50	.0700		2 - 56 NC, 2 - 64 NF			P	.3230			9 mm - .75	
49	.0730					21/64"	.3281		1/8" - 28 BSP		
48	.0760					Q	.3320	3/8" - 24 NF			
5/64"	.0781		3 - 48 NC		EX-1	8.5 mm	.3346			10 mm - 1.50	
47	.0785					R	.3390		1/8" - 27 NPT	10 mm - 1.50	
2.0 mm	.0787					11/32"	.3438			10 mm - 1.25	
46	.0810					S	.3480				
45	.0820		3 - 56 NF			9.0 mm	.3543			10 mm - 1.00	
44	.0860		4 - 36 NS			T	.3580			10 mm - 1.00	
43	.0890		4 - 40 NC			23/64"	.3594				
42	.0935					U	.3680	7/16" - 14 NC			
3/32"	.0938		4 - 48 NF			9.5 mm	.3740			11 mm - 1.50	
41	.0960					3/8"	.3750			11 mm - 1.50	ST-5
40	.0980					V	.3770				
2.5 mm	.0984			3 mm - .50		W	.3860				
39	.0995			3 mm - .50		25/64"	.3906	7/16" - 20 NF			
38	.1015	1/8" - 40 NS	5 - 40 NC			10.0 mm	.3937				
37	.1040		5 - 44 NF			X	.3970				
36	.1065		6 - 32 NC			Y	.4040				
7/64"	.1094				EX-2	13/32"	.4062			12 mm - 1.75	EX-6
35	.1100					Z	.4130			12 mm - 1.50	
34	.1110		6 - 36 NS			10.5 mm	.4134			12 mm - 1.50	
33	.1130		6 - 40 NF			27/64"	.4219	1/2" - 13 NC		12 mm - 1.25	
32	.1160		6 - 48 NS			11.0 mm	.4331				
3.0 mm	.1181					7/16"	.4375		1/4" - 18 NPT		
31	.1200					11.5 mm	.4528				
1/8"	.1250					29/64"	.4531	1/2" - 20 NF, 1/2" - 24 NS	1/4" - 19 BSP		
30	.1285			4 mm - .70, 4 mm - .75		15/32"	.4688			14 mm - 2.0	ST-6
29	.1360		8 - 32 NC, 8 - 36 NF			12.0 mm	.4724			14 mm - 2.0	
3.5 mm	.1378					31/64"	.4844	9/16" - 12 NC			
28	.1405					12.5 mm	.4921			14 mm - 1.5	
9/64"	.1406		8 - 40 NS		ST-1	1/2"	.5000			14 mm - 1.25, 14 mm - 1.5	
27	.1440					13.0 mm	.5118			14 mm - 1.25	
26	.1470	3/16" - 24 NS				33/64"	.5156	9/16" - 18 NF			
25	.1495		10 - 24 NC			17/32"	.5313	5/8" - 11 NC			EX-7
24	.1520					35/64"	.5469			16 mm - 2.0	
23	.1540					9/16"	.5625		3/8" - 18 NPT		ST-7
5/32"	.1562	3/16" - 32 NS			EX-3	37/64"	.5781	5/8" - 18 NF	3/8" - 18 NPT	16 mm - 1.5	
22	.1570					19/32"	.5938	11/16" - 11 NS			
4.0 mm	.1575					39/64"	.6094			18 mm - 2.5	
21	.1590		10 - 32 NF			5/8"	.6250	11/16" - 16 NS			
20	.1600			5 mm - .90		41/64"	.6406				
19	.1660			5 mm - .80		21/32"	.6562	3/4" - 10 NC		18 mm - 1.5	
18	.1695					43/64"	.6719				
11/64"	.1719					11/16"	.6875	3/4" - 16 NF		20 mm - 2.5	
17	.1730					45/64"	.7031		1/2" - 14 NPT		
16	.1770		12 - 24 NC			23/32"	.7188				
4.5 mm	.1772					47/64"	.7344				
15	.1800					3/4"	.7500				
14	.1820		12 - 28 NF			49/64"	.7656	7/8" - 9 NC			
13	.1850		12 - 32 NEF			25/32"	.7812				
3/16"	.1875				ST-2	51/64"	.7969				
12	.1890					13/16"	.8125	7/8" - 14 NF		22 mm - 1.5	EX-8
11	.1910					53/64"	.8281			24 mm - 3.0	
10	.1935		14 - 20 NS			27/32"	.8438				
9	.1960					55/64"	.8594				
5.0 mm	.1969			6 mm - 1.00		7/8"	.8750	1" - 8 NC		24 mm - 2.0	
8	.1990			6 mm - 1.00		57/64"	.8906				
7	.2010	1/4" - 20 NC				29/32"	.9062				
13/64"	.2031		14 - 24 NS			59/64"	.9219	1" - 12 NF	3/4" - 14 NPT		
6	.2040					15/16"	.9375	1" - 14 NS			
5	.2055					61/64"	.9531				
4	.2090	1/4" - 24 NS				31/32"	.9688				
3	.2130	1/4" - 28 NF				63/64"	.9844	1-1/8" - 7 NC			
5.5 mm	.2165					1"	1.0000				
7/32"	.2188	1/4" - 32 NEF				1-1/64"	1.0156				
2	.2210					1-1/32"	1.0312				
1	.2280	1/4" - 40 NS				1-1/16"	1.0625				EX-9
A	.2340					1-3/32"	1.0938				
15/64"	.2344			7 mm - 1.00	ST-3	1-1/8"	1.1250				
6.0 mm	.2362			7 mm - 1.00		1-5/32"	1.1562		1" - 11-1/2 NPT		
B	.2380					1-3/16"	1.1875				
C	.2420					1-1/4"	1.2500				
D	.2460					1-5/16"	1.3125				
E	.2500					1-3/8"	1.3750				
1/4"	.2500				EX-4	1-7/16"	1.4375				
6.5 mm	.2559					1-1/2"	1.5000		1-1/4" - 11-1/2 NPT		
F	.2570	5/16" - 18 NC									

# **Step Drills and Carbide Hole Cutters**

Step Drills

Carbide Hole Cutters

Accessories



# UNIBIT® STEP DRILLS AND CARBIDE HOLE CUTTERS

## Easy-to-Sharpen, Non-Skid Tip

- Eliminates skidding and the need for center punching; the tip gives sure starts even on curved surfaces

## Multiple Steps

- As many as 13 different hole sizes in a single bit eliminates the need to maintain a toolbox full of specific size drill bits

## 3 Flatted Shank

- Prevents slipping in drill chuck

## Single-Fluted Cutting Edge

- Helps assure true round holes and allows greater control

## Hardened Steel For Long Life

- Constructed of industrial grade high speed molybdenum steel and heat treated to assure maximum durability



## Fractional, Self-Starting - Multiple Hole Sizes

10231



Style #	Number of Holes	Hole Sizes	Increments	Shank Size	Max. Material Thickness	Carded Stock #
1	13	1/8" - 1/2"	1/32"	1/4"	1/8"	10231
2	6	3/16" - 1/2"	1/16"	1/4"	3/8"	10232
3	9	1/4" - 3/4"	1/16"	3/8"	1/8"	10233
4	12	3/16" - 7/8"	1/16"	3/8"	1/8"	10234
5	10	1/4" - 1-3/8"	1/8"	1/2"	1/8"	10235
9	2	7/8" and 1-1/8" (1/2" and 3/4" KO)	-	1/2"	1/8"	10239

For additional Step Drill Bits see LOCK-N-LOAD™, Page 10-2



**SAFETY INSTRUCTIONS:** Failure to follow warnings may result in bodily injury.  
**WARNING:** ALWAYS wear safety goggles to protect your eyes and wear other appropriate safety items for protection.

# UNIBIT® STEP DRILLS

## Fractional, Self-Starting - Titanium Nitride Coated - Multiple Hole Sizes

Style #	Number of Holes	Hole Sizes	Increments	Shank Size	Max. Material Thickness	Carded Stock #
1T	13	1/8" - 1/2"	1/32"	1/4"	1/8"	15101
2T	6	3/16" - 1/2"	1/16"	1/4"	3/8"	15102
3T	9	1/4" - 3/4"	1/16"	3/8"	1/8"	15103
4T	12	3/16" - 7/8"	1/16"	3/8"	1/8"	15104



15101

- Titanium nitride coating causes less friction, which increases product life

## Fractional, Self-Starting - Single Hole Sizes

Style #	Hole Sizes	KO Size	Shank Size	Carded Stock #
10	1/2"	N/A	1/4"	10310
11	7/8"	1/2"	3/8"	10311
12	3/8"	N/A	1/4"	10312
13	1-1/8"	3/4"	1/2"	10313
14	1-7/32"	Oil tight switches	1/2"	10314



10312

## Fractional, Hole Enlarging - Multiple Hole Sizes

Style #	Number of Holes	Hole Sizes	Increments	Shank Size	Max. Material Thickness	Carded Stock #
20	8	9/16" - 1"	1/16"	1/2"	1/8"	10220
21	10	13/16" - 1-3/8"	1/16"	1/2"	1/8"	10221



10220

- Provides the user with an extensive range of sizes and versatility



# UNIBIT® STEP DRILLS

## Fractional, Self-Starting Multiple Hole Sizes - Sets



10502



15502



10225



10226



10227

Style #	Description	Contents	Stock #
502	3 pc HSS Set	1, 2 and 3	10502
502T	3 pc TiN Set with Pouch	1T, 2T and 3T	15502
225	4 pc General Purpose Set	1, 2, 4 and 21	10225
226	7 pc Automotive Set	1, 2, 4, 10, 12, 10A and 12A	10226
227	8 pc Rustproofing Set	Two each: 10 and 12 One each: 10A, 10B, 12A and 12B	10227

## Metric, Self-Starting - Multiple Hole Sizes



11101

Style #	Number of Holes	Hole Sizes	Increments	Shank Size	Max. Material Thickness	Carded Stock #
1M	9	4 mm - 12 mm	1 mm	1/4" / 6.5 mm	5 mm	11101
2M	5	4 mm - 12 mm	2 mm	1/4" / 6.5 mm	11 mm	11102
3M	7	6 mm - 18 mm	2 mm	3/8" / 10 mm	5 mm	11103
4M	10	4 mm - 22 mm	2 mm	3/8" / 10 mm	5 mm	11104
5M	13	5 mm - 35 mm	2-3 mm	1/2" / 13 mm	3.5 mm	11105

## Metric, Self-Starting - Titanium Nitride Coated Multiple Hole Sizes



16103

Style #	Number of Holes	Hole Sizes	Increments	Shank Size	Max. Material Thickness	Carded Stock #
1MT	9	4 mm - 12 mm	1 mm	1/4" / 6.5 mm	5 mm	16101
2MT	5	4 mm - 12 mm	2 mm	1/4" / 6.5 mm	11 mm	16102
3MT	7	6 mm - 18 mm	2 mm	3/8" / 10 mm	5 mm	16103
4MT	10	4 mm - 22 mm	2 mm	3/8" / 10 mm	5 mm	16104
5MT	13	5 mm - 35 mm	2-3 mm	1/2" / 13 mm	3.5 mm	16105

- Titanium nitride coating causes less friction, which increases product life

# UNIBIT® STEP DRILLS

## Metric, Self-Starting - Single Hole Sizes

Style #	Hole Sizes	KO Size	Shank Size	Carded Stock #
12M	8 mm	N/A	1/4" / 6.5 mm	11312



11312

## Metric, Hole-Enlarging

Style #	Number of Holes	Hole Sizes	Increments	Shank Size	Max. Material Thickness	Carded Stock #
20M	6	14 mm - 24 mm	2 mm	1/2" / 13 mm	5 mm	11580
21M	8	20 mm - 34 mm	2 mm	1/2" / 13 mm	5 mm	11581



11580

- Provides the user with an extensive range of sizes and versatility

## Step Drill Stop Collars

- Stop collars prevent over penetration in applications such as rust proofing



10491



10494

Style #	Length	Diameter	Use with Step Drill Style #	Stock #
10A	1/2"	5/8"	10	10491
10B	3"	5/8"	10	10492
12A	1/2"	1/2"	12	10493
12B	3"	1/2"	12	10494
12MA	12 mm	12 mm	12M	11405
12MB	75 mm	12 mm	12M	11406

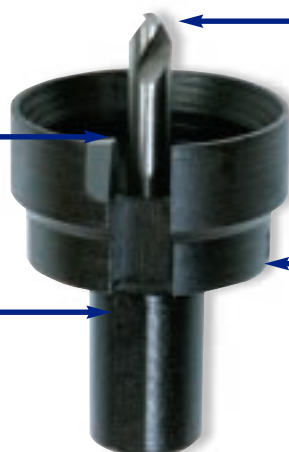
# UNIBIT® CARBIDE HOLE CUTTERS

## Carbide Cutting Edge

- Cuts cleanly, without hogging, chattering or vibration, for true, round holes in materials up to 10 gauge

## 3 Flatted Shank

- Provides for a more secure chuck hold than available on most other hole cutters



## 135° Split Point

- Helps ensure a true start with no walking; no center-punching is required
- 3/16" pilot drill is double-ended for long life

## Hardened Carbon Steel Body

- For long life and tool durability

## Carbide Hole Cutters

- Designed to make holes in thin material, less than 1/8"
- Available in 18 sizes from 3/4" to 2-1/2" / 19 mm to 64 mm
- Turned from solid steel, not welded
- Carbide tip brazed to hardened steel body
- Makes clean, round holes
- Ideal for use with: stainless steel, mild steel, copper, brass, aluminum, plexiglass, fiberglass and laminates

Style #	Hole Sizes	KO Size	Shank Size	Carded Stock #
329	3/4" / 19 mm	PG11	3/8"	10329
331	13/16" / 21 mm	PG13	3/8"	10331
332	7/8" / 22 mm	1/2", PG16	3/8"	10332
335	1" / 25 mm	N/A	3/8"	10335
337	1-1/16" / 27 mm	N/A	3/8"	10337
338	1-1/8" / 29 mm	3/4", PG21	1/2"	10338
340	1-7/32" / 31 mm	Oil Tight Switches	1/2"	10340
341	1-1/4" / 32 mm	N/A	1/2"	10341
342	1-5/16" / 33 mm	N/A	1/2"	10342
344	1-3/8" / 35 mm	1"	1/2"	10344
346	1-7/16" / 37 mm	PG29	1/2"	10346
347	1-1/2" / 38 mm	N/A	1/2"	10347
353	1-3/4" / 44 mm	1-1/4"	1/2"	10353
359	2" / 51 mm	1-1/2"	1/2"	10359
362	2-1/8" / 54 mm	Locksmith, PG42	1/2"	10362
365	2-1/4" / 57 mm	N/A	1/2"	10365
368	2-3/8" / 60 mm	2", PG48	1/2"	10368
371	2-1/2" / 64 mm	N/A	1/2"	10371

## Carbide Hole Cutter Kits



10564

Style #	Description	Contents	Stock #
503	Deluxe Kit 16 Sizes	One each excl. 365, 371	10563
504	Electrical Kit 6 Sizes	332, 338, 344, 353, 359, 368	10564
508	Electrical Kit 4 Sizes	332, 338, 344, 353	10568
509	Plumbing Kit 6 Sizes	329, 332, 338, 347, 353, 362	10569
510	Refrigeration Kit 6 Sizes	329, 332, 338, 344, 353, 368	10570
511	Automotive Kit 6 Sizes	329, 332, 335, 338, 341, 347	10511
512	Locksmith Kit 6 Sizes	332, 335, 341, 347, 353, 362	10512

Each kit contains two style # 432 pilot drill replacements & one hex key

## Carbide Hole Cutter Accessory

Style #	Description	Stock #
432	Double-Ended Pilot Drill Replacement	10432



# ***Masonry Tools***

**Rotary and  
Rotary Percussion  
Drill Bits**

**Glass and Tile Drill Bits**

**Multi-Material Drill Bits**

**Concrete Screw  
Anchor Bits**

**Masonry Anchor Kits**

**Tile Cutters and  
Accessories**



# HANSON® MASONRY DRILL BITS

## Rotary Percussion Carbide-Tipped Bits 501 Series

- Nickel-plated for fast, smooth performance
- Specially designed carbide tip for rotary and roto-percussion drill applications
- Drills 7/16" and larger have reduced shanks
- Slow spiral for quick, easy debris removal



50132

Diameter	Overall Length	Shank	Carded Stock #	Boxed Stock #
1/8"	3"	1/8"	50108	—
5/32"	3"	5/32"	50110	—
3/16"	4"	3/16"	50112	—
1/4"	4"	1/4"	50116	—
5/16"	4"	5/16"	50120	—
3/8"	4"	3/8"	50124	—
7/16"	6"	3/8" *	50128	—
1/2"	6"	3/8" *	50132	—
1/2"	6"	1/4" *	50133	—
9/16"	6"	3/8" *	50136	—
5/8"	6"	3/8" *	50140	—
3/4"	6"	3/8" *	50148	—
7/8"	6"	1/2" *	50156	—
1"	6"	1/2" *	50164	—
1-1/8"	6"	1/2" *	—	50172
1-1/4"	6"	1/2" *	—	50180
1-3/8"	6"	1/2" *	—	50188
1-1/2"	6"	1/2" *	—	50196

## Rotary Percussion Carbide-Tipped Bits 501 Series - 4 Piece Set



50165

Description	Contents	Pouched Stock #
4 pc Set	1/4", 5/16", 3/8", 1/2"	50165

\*Reduced Shank



**SAFETY INSTRUCTIONS:** Failure to follow warnings may result in bodily injury.  
**WARNING:** ALWAYS wear safety goggles to protect your eyes and wear other appropriate safety items for protection.



# HANSON® MASONRY DRILL BITS

## 13" Length - Rotary Percussion Carbide-Tipped Bits - 523/513 Series



51332

Diameter	Shank	Carded Stock #	Tubed Stock #
1/4"	1/4"	52316	51316
5/16"	5/16"	52320	51320
3/8"	3/8"	52324	51324
7/16"	3/8" *	52328	51328
1/2"	1/2"	52332	51332
9/16"	1/2" *	—	51336
5/8"	1/2" *	52340	51340
3/4"	1/2" *	52348	51348
7/8"	1/2" *	—	51356
1"	1/2" *	52364	51364

- For deep drilling
- Drills 7/16" and larger have reduced shanks (except 1/2")



## 18" Length - Rotary Percussion Carbide-Tipped Bits - 518 Series



51836

Diameter	Shank	Tubed Stock #
1/4"	1/4"	51816
5/16"	5/16"	51820
3/8"	3/8"	51824
7/16"	3/8" *	51828
1/2"	1/2"	51832
9/16"	1/2" *	51836
5/8"	1/2" *	51840
3/4"	1/2" *	51848
7/8"	1/2" *	51856
1"	1/2" *	51864

- Nickel-plated for fast, smooth performance
- Specially designed carbide tip for rotary & roto-percussion drill applications
- For deep drilling of masonry and cinder block
- 7/16" and larger drills have reduced shanks (except 1/2")
- Slow spiral for quick, easy debris removal



# HANSON® MASONRY DRILL BITS

## Economy Rotary Carbide-Tipped Bits - 611 Series

- All-purpose for do-it-yourselfers
- Zinc plated
- 3/8" and larger drills have reduced shanks



Diameter	Overall Length	Shank	Carded Stock #
1/8"	3"	1/8"	61108
3/16"	4"	3/16"	61112
1/4"	4"	1/4"	61116
5/16"	4"	1/4"	61120
3/8"	4"	1/4" *	61124
7/16"	4"	1/4" *	61128
1/2"	4"	1/4" *	61132
5/8"	6"	3/8" *	61140
3/4"	6"	3/8" *	61148

## Economy Rotary Carbide-Tipped Bits 611 Series - Plastic Set



61170

Description	Contents	Carded Stock #
5 pc Set	3/16", 1/4", 5/16", 3/8", 1/2"	61170

## Glass and Tile Carbide-Tipped Bits

- For drilling glass, tile and ceramic
- Unique spear point design
- Sizes range from 1/8" to 1/2"
- Tungsten carbide tipped
- Cuts a perfectly round hole without chipping or breaking



Diameter	Carded Stock #
1/8"	50508
3/16"	50512
1/4"	50516
5/16"	50520
3/8"	50524
1/2"	50532

# JORAN® UNI-PLUS® MASONRY DRILL BITS

## Multi-Material Carbide-Tipped Bits



50324

- This one bit drills through many materials including: masonry, metal, plastic and wood
- Ideal for drilling through layers of different materials
- For rotary drilling only

Diameter	Overall Length	Shank Diameter	Carded Stock #
1/8"	3"	1/8"	50308
5/32"	3-1/8"	5/32"	50310
3/16"	3-1/2"	3/16"	50312
7/32"	3-3/4"	7/32"	50314
1/4"	4-1/8"	1/4"	50316
9/32"	4-3/8"	9/32"	50318
5/16"	4-3/4"	5/16"	50320
3/8"	5-1/2"	3/8"	50324
7/16"	6"	3/8"	50326
1/2"	6"	3/8"	50332
9/16"	6"	3/8"	50334
5/8"	6"	3/8"	50336



50340



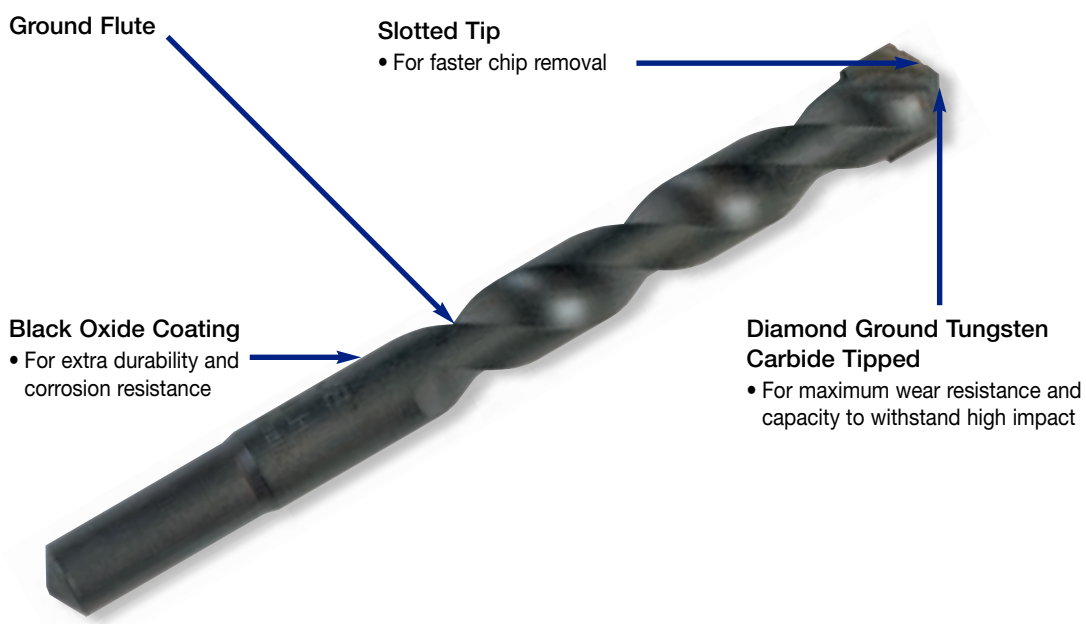
50350

## Multi-Material Carbide-Tipped Sets

Description	Contents	Carded Stock #
3 pc Set	1/8", 3/16", 1/4"	50340
5 pc Set	1/8", 5/32", 3/16", 1/4", 5/16"	50350

For additional UNI-PLUS® Drill Bits see LOCK-N-LOAD™, Page 10-2

# JORAN® PULVERIZER™ MASONRY DRILL BITS



## Rotary Percussion Carbide-Tipped Bits - 535 Series

- Tip sharpened by diamond wheels to provide maximum cutting power
- For use with roto-percussion drills
- Drills 1/2" and larger have reduced shanks



Diameter	Overall Length	Shank	Carded Stock #
1/8"	3"	1/8"	53508**
5/32"	3-1/2"	5/32"	53510**
3/16"	4"	3/16"	53512**
1/4"	4"	1/4"	53516
5/16"	4"	5/16"	53520
3/8"	4"	3/8"	53524
1/2"	6"	3/8" *	53532
5/8"	6"	1/2" *	53540
3/4"	6"	1/2" *	53548

## 13" Length - Rotary Percussion Carbide-Tipped Bits - 538 Series

- For deep drilling
- Drills 1/2" and larger have reduced shanks

Diameter	Shank	Tubed Stock #
1/4"	1/4"	53816
5/16"	1/4"	53820
3/8"	3/8"	53824
1/2"	3/8" *	53832
5/8"	1/2" *	53840
3/4"	1/2" *	53848
1"	1/2" *	53864

\* Reduced Shank    \*\* Carbide Tips Not Slotted

# JORAN® MASONRY DRILL BITS

## Concrete Screw Anchor - Carbide-Tipped Bits



57086

Diameter	Overall Length	Recommended for Screw Anchor Size	Carded Stock #	Bulk Stock #
5/32"	3-1/2"	3/16" x 1-1/4" – 1-3/4"	57080	–
5/32"	4-1/2"	3/16" x 2-1/4" – 2-3/4"	57081	–
5/32"	5-1/2"	3/16" x 3-1/4" – 4"	57082	57092
3/16"	3-1/2"	1/4" x 1-1/4" – 1-3/4"	57083	–
3/16"	4-1/2"	1/4" x 2-1/4" – 2-3/4"	57084	–
3/16"	5-1/2"	1/4" x 3-1/4" – 4"	57085	57095
3/16"	6-1/2"	1/4" x 4-1/4" – 5"	57086	57096

- Industrial grade tungsten carbide tip is specially formulated for the optimal combination of toughness and durability
- Bronze alloy brazing for superior heat resistance
- Ground (not rolled) double flutes for fast, efficient removal of drilling dust
- Hardened chrome vanadium tool steel body for maximum strength and longer bit life
- Shot peened finish
- The shank will fit in all tool holders designed for this application

## HANSON® MASONRY ANCHOR KITS



54444



54445



54446

- Each kit includes a tungsten carbide-tipped masonry drill bit, blue anchors, and combo head screws
- Available in three different sizes for a variety of mounting applications
- Ideal for mounting almost anything in masonry or hollow walls

Description	Contents	Carded Stock #
1/4" x 1" Conical Anchor Kit	100 - 1/4" x 1" Blue Anchors 100 - #10 Combo Head Screws 1 - 1/4" Masonry Drill Bit	54444
3/16" x 7/8" Conical Anchor Kit	100 - 3/16" x 7/8" Blue Anchors 100 - #8 Combo Head Screws 1 - 3/16" Masonry Drill Bit	54445
5/16" x 1-3/8" Conical Anchor Kit	50 - 5/16" x 1-3/8" Blue Anchors 50 - #14 Combo Head Screws 1 - 5/16" Masonry Drill Bit	54446



# IRWIN® TILE CUTTERS AND ACCESSORIES

## Smooth Running Handle

- For easier operation
- Provides more accurate cuts

## Die Cast Aluminum Base

- Rugged quality material for the professional contractor or for the do-it-yourselfer

## Rubber Pads

- Prevent tile marking

## Replaceable Carbide Cutting Wheel

- Provides straight and clean cuts

## Reversible Angle Gauge

- For cutting angles 0-45°

## Straight and Angle Tile Cutters

- All models cut floor and wall tiles up to 3/8" / 10 mm thick



3030



3010

Maximum Cutting Length	Weight	Boxed Stock #
13" / 350 mm	3 lb / 1525 g	3010
17" / 450 mm	13 lb / 6370 g	3000
19" / 500 mm	12 lb / 6150 g	3030

## Wall Tile Hole Cutters



3110



3100

Cutting Diameter	For Use With	Weight	Boxed Stock #
1" to 3" / 25 mm to 80 mm	3030	2 lb / 850 g	3110
1" to 3" / 25 mm to 80 mm	Stand-alone model	12 lb / 6200 g	3100

## Replacement Parts and Accessories



3009



3001



3101



3029

Description	For Use With	Stock #
Carbide Cutting Wheel	3010	3009
Carbide Cutting Wheel	3000	3001
Carbide Cutting Disk	3030	3029
Carbide Cutting Disk	3100 & 3110	3101
Tile Scriber	—	50535
Tile Pliers	—	50539

# ***Fastener Drive Tools***

**Nutsetters**

**Insert Bits**

**Power Bits**

**Bit Holders**

**Sockets**

**Socket Adapters**

**Quick Change**

**Chuck Adapters**

**Sets**

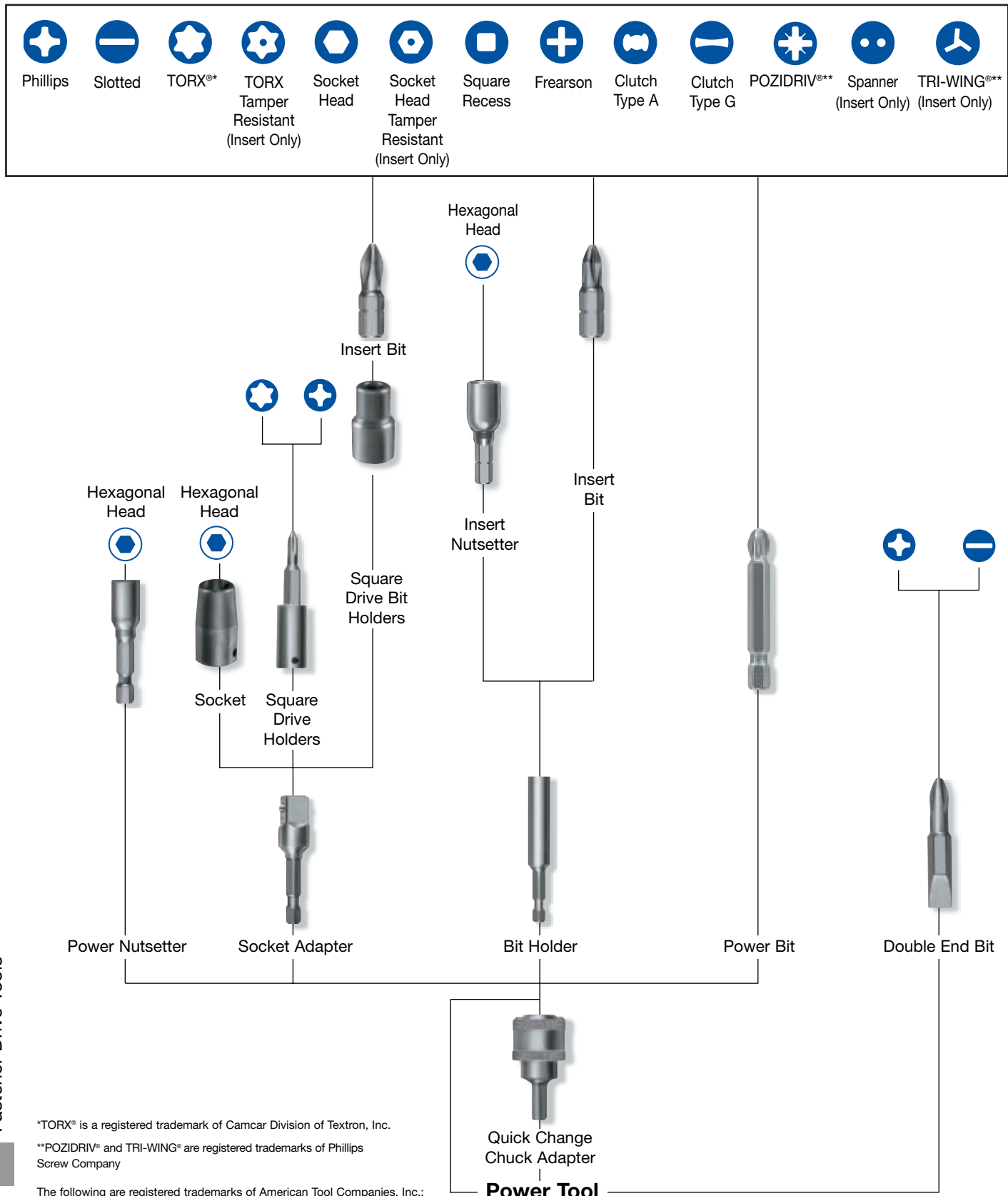
**Screwdrivers**

**Nutdrivers**

**Specialty Tools & Sets**



# HANSON® FASTENER DRIVE SYSTEM



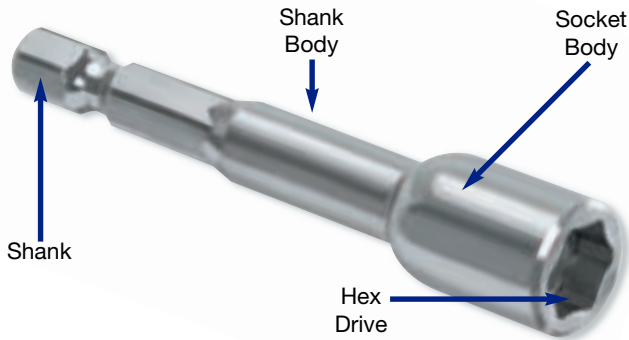
\*TORX® is a registered trademark of Camcar Division of Textron, Inc.

\*\*POZIDRIV® and TRI-WING® are registered trademarks of Phillips Screw Company

The following are registered trademarks of American Tool Companies, Inc.:  
GOLD SET®, UNI-KIT®, CHIPWAND®, PIC-A-BIT®, GRABIT™ Jar.



# HANSON® NUTSETTERS



## Quality

The strength of HANSON Fastener Drive Tools is based on a dedication to quality. Our tools are made of only the finest materials, manufactured to exacting tolerances. Our commitment to provide you with the finest tools in the industry continues to *drive* our business.

## GOLD SET® Nutsetters

GOLD SET Nutsetters stand apart from the competition for reasons beyond the distinctive gold tone finish. By combining unsurpassed magnetic power and a lobular design drive, GOLD SET Nutsetters give you total control of the fastener.

## Features

### Powerful Magnet

- 5 times more powerful than common magnets
- Provides positive retention of the screw which improves speed of installation
- Ideal for extended reach applications

### Lobular Design Drive

- Drives the fastener on the sides instead of forcing the corners to turn
- Maintains the true shape of the fastener - dramatically reduces breakage and stripping damage
- Provides more clearance on the corners of the fastener where paint build-up can occur

### Universal 1/4" Hex Shank

- Fits most power screwdrivers, variable speed drills and cordless drills

### Maximum Strength

- Made of shock resistant tool steel and heat treated for maximum strength and hardness



94732

	Hex Drive	Shank Dia.	Socket Body	Overall Length	Carded Stock #	Bulk Stock #
C	1/4"	1/4"	7/16"	1-7/8"	94712PK	94712
C	5/16"	1/4"	1/2"	1-7/8"	94732PK	94732
C	3/8"	1/4"	9/16"	1-7/8"	94752PK	94752
C	7/16"	1/4"	5/8"	1-7/8"	94772PK	94772

## GOLD SET Power Nutsetters

- Lobular Design Drive reduces stripping damage by driving the fastener on the flats instead of forcing the corners to turn
- For use with sheet metal screws and other hexagonal head fasteners



94872

	Hex Drive	Shank Dia.	Socket Body	Shank Body	Overall Length	Carded Stock #	Bulk Stock #
C	1/4"	1/4"	7/16"	5/16"	2-9/16"	94812PK	94812
C	5/16"	1/4"	1/2"	5/16"	2-9/16"	94832PK	94832
C	3/8"	1/4"	9/16"	5/16"	2-9/16"	94852PK	94852
C	7/16"	1/4"	5/8"	5/16"	2-9/16"	94872PK	94872

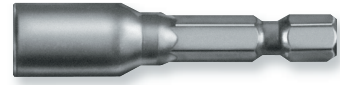
## GOLD SET Power Nutsetters

- Lobular Design Drive reduces stripping damage by driving the fastener on the flats instead of forcing the corners to turn
- For use with sheet metal screws and other hexagonal head fasteners

C = magnetic

# HANSON® NUTSETTERS

## Power Nutsetters – Fractional

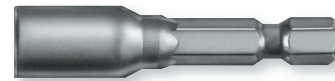


94212

- For use with sheet metal screws and other hexagonal head fasteners
- Standard six point design

	Hex Drive	Shank Dia.	Socket Body	Shank Body	Overall Length	Bulk Stock #
	1/4"	1/4"	7/16"	–	1-7/8"	94211
C	1/4"	1/4"	7/16"	–	1-7/8"	94212
▼	1/4"	1/4"	1/2"	–	1-7/8"	94215
C ▼	1/4"	1/4"	1/2"	–	1-7/8"	94216
	5/16"	1/4"	1/2"	–	1-7/8"	94231
C	5/16"	1/4"	1/2"	–	1-7/8"	94232
	3/8"	1/4"	9/16"	–	1-7/8"	94251
C	3/8"	1/4"	9/16"	–	1-7/8"	94252
	7/16"	1/4"	5/8"	–	1-7/8"	94271
C	7/16"	1/4"	5/8"	–	1-7/8"	94272
	1/4"	1/4"	7/16"	5/16"	2-9/16"	94311
C	1/4"	1/4"	7/16"	5/16"	2-9/16"	94312
	1/4"	1/4"	7/16"	3/8"	2-9/16"	94315
C	1/4"	1/4"	7/16"	3/8"	2-9/16"	94316
	5/16"	1/4"	1/2"	5/16"	2-9/16"	94331
C	5/16"	1/4"	1/2"	5/16"	2-9/16"	94332
	5/16"	1/4"	1/2"	3/8"	2-9/16"	94335
C	5/16"	1/4"	1/2"	3/8"	2-9/16"	94336
	3/8"	1/4"	9/16"	5/16"	2-9/16"	94351
C	3/8"	1/4"	9/16"	5/16"	2-9/16"	94352
	3/8"	1/4"	9/16"	3/8"	2-9/16"	94355
C	3/8"	1/4"	9/16"	3/8"	2-9/16"	94356
	7/16"	1/4"	5/8"	3/8"	2-9/16"	94371
C	7/16"	1/4"	5/8"	3/8"	2-9/16"	94372
C	1/4"	1/4"	7/16"	–	4"	94414
C	5/16"	1/4"	1/2"	–	4"	94434
C	1/4"	1/4"	7/16"	–	6"	94416
C	5/16"	1/4"	1/2"	–	6"	94436

## Power Nutsetters – Metric



94202

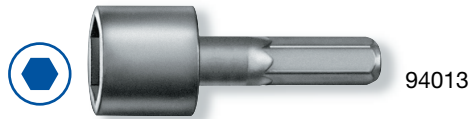
- For use with sheet metal screws and other hexagonal head fasteners
- Standard six point design

	Hex Drive	Shank Dia.	Socket Dia.	Overall Length	Bulk Stock #
	6 mm	1/4"	11.1 mm	47.6 mm	94201
C	6 mm	1/4"	11.1 mm	47.6 mm	94202
	8 mm	1/4"	12.7 mm	47.6 mm	94203
C	8 mm	1/4"	12.7 mm	47.6 mm	94204
	10 mm	1/4"	14.3 mm	47.6 mm	94205
C	10 mm	1/4"	14.3 mm	47.6 mm	94206

C = magnetic ▼ = tapered



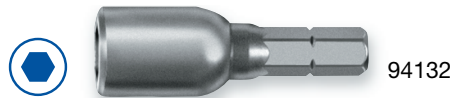
# HANSON® NUTSETTERS



## Power Nutsetters – Fractional

- For use with sheet metal screws and other hexagonal head fasteners
- Not for use with quick change chuck adapters

Hex Drive	Shank Dia.	Overall Length	Bulk Stock #
3/16"	1/4"	1-15/16"	94000
1/4"	1/4"	1-13/32"	94003
9/32"	1/4"	1-27/64"	94005
5/16"	1/4"	1-29/64"	94007
11/32"	1/4"	1-29/64"	94009
3/8"	1/4"	1-31/64"	94011
7/16"	1/4"	1-17/32"	94013



## Insert Nutsetters – Fractional

- For use with sheet metal screws and other hexagonal head fasteners
- Can be used in bit holding screwdrivers or in any non-magnetic or magnetic bit holders

	Hex Drive	Shank Dia.	Socket Body	Overall Length	Carded Stock #	Bulk Stock #
	1/4"	1/4"	7/16"	1-1/2"	–	94111
C	1/4"	1/4"	7/16"	1-1/2"	94112PK	94112
	5/16"	1/4"	1/2"	1-1/2"	–	94131
C	5/16"	1/4"	1/2"	1-1/2"	94132PK	94132
	5/16"	5/16"	9/16"	1-5/8"	–	94135
C	5/16"	5/16"	9/16"	1-5/8"	–	94136
	3/8"	1/4"	9/16"	1-5/8"	–	94151
C	3/8"	1/4"	9/16"	1-5/8"	94152PK	94152
	7/16"	1/4"	5/8"	1-5/8"	–	94171
C	7/16"	1/4"	5/8"	1-5/8"	94172PK	94172

## Nutsetter Sets

- Combination sets of the most commonly used nutsetter sizes

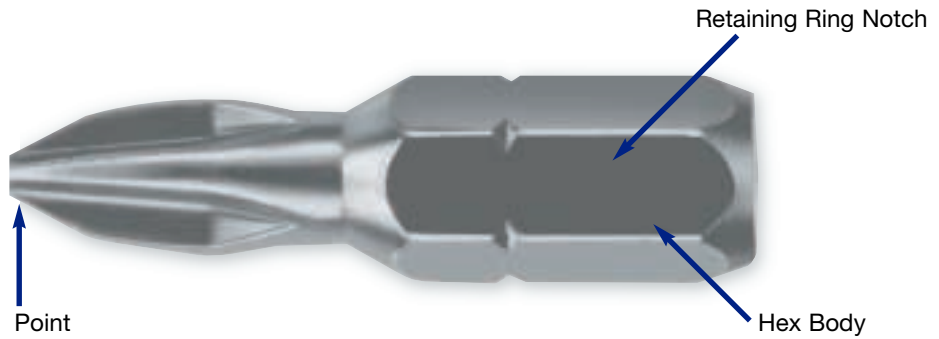
	Contents	Total Pcs.	Bulk Stock #
C	Power Nutsetter Set (1-7/8" OL) - 1/4", 5/16" & 3/8"	3	91971
C	Power Nutsetter Set (2-9/16" OL) - 1/4", 5/16" & 3/8"	3	91973
C	GOLD SET® Power Nutsetter Set (2-9/16" OL) - 1/4", 5/16" & 3/8"	3	91977
C	Power Nutsetter Set (2-9/16" OL) - 1/4", 5/16", 3/8", 7/16"	4	91986
C	Power Nutsetter Set (1-7/8" OL) - 1/4", 5/16", 3/8", 7/16"	4	91988
C	Power Nutsetter Set (2-9/16" OL) - 1/4", 5/16", 3/8", 7/16" & 1-7/8" OL - 1/4", 1/4" Tapered, 5/16", 3/8", 7/16"	9	91998
	Power Nutsetter Set 3/16", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16"	7	91979

C = magnetic

OL = Overall Length

# HANSON® INSERT BITS

- Insert bits are compact and versatile, allowing them to be used as hand tool or power tool accessories. By placing it into a bit holding screwdriver, the insert bit can be used in hand driving applications. When inserted into a power bit holder and placed into a chuck adapter or directly into the drill chuck, the insert bit becomes a convenient power tool accessory



## Phillips Insert Bits

- Most popular fastener style. Used in most industries



	Pt. Size	Shank	Overall Length	Bag Stock #	Carded Stock #	Bulk Stock #
	#0	1/4"	1"	—	—	92001
	#1	1/4"	1"	—	92005PK	92005
◇	#1	1/4"	1"	—	—	92007
	#2	1/4"	1"	92011BAG	92011PK	92011
	#3	1/4"	1"	—	92019PK	92019
	#1	1/4"	1-1/2"	—	—	92025
	#2	1/4"	1-1/2"	—	—	92027
	#3	1/4"	1-1/2"	—	—	92035
	#2	1/4"	2"	—	—	92039
◇	#2	1/4"	2"	—	—	92053
	#2	1/4"	2-1/2"	—	—	92045
◇	#2	1/4"	2-1/2"	—	—	92055
	#1	5/16"	1-1/4"	—	—	92073
	#2	5/16"	1-1/4"	—	—	92075
	#3	5/16"	1-1/4"	—	—	92077
	#4	5/16"	1-1/4"	—	—	92079

## Phillips Drywall Insert Bits

- Screwdriver bits designed specifically for use with Phillips drywall screws



	Pt. Size	Shank	Overall Length	Bag Stock #	Carded Stock #	Bulk Stock #
◇	#2	1/4"	1"	92047BAG	92047PK	92047
†	#2	1/4"	1"	—	—	92063

## POZIDRIV®\* Insert Bits

- Used commonly in the automotive industry



	Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
	# 1	1/4"	1"	92083PK	92083
	# 2	1/4"	1"	92085PK	92085
	# 3	1/4"	1"	92087PK	92087

◇ = reduced diameter

† = short projection tip for shallow recess screws

\*POZIDRIV® is a registered trademark of Phillips Screw Company

# HANSON® INSERT BITS



92595

	Shank	Overall Length	Bulk Stock #
	1/4"	1"	92595
	5/16"	1-3/8"	92597

## Frearson Insert Bits

- Frearson recess is the same across all fasteners - no differing point sizes



92115

Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
3-4	1/4"	1"	92105PK	92105
4-5	1/4"	1"	92107PK	92107
6-8	1/4"	1"	92111PK	92111
8-10	1/4"	1"	92113PK	92113
10-12	1/4"	1"	92115PK	92115
12-14	1/4"	1"	—	92117
14-16	1/4"	1"	—	92119
4-5	1/4"	1-1/2"	—	92135
6-8	1/4"	1-1/2"	—	92139
8-10	1/4"	1-1/2"	—	92141
10-12	1/4"	1-1/2"	—	92143
12-14	1/4"	1-1/2"	—	92145
14-16	1/4"	1-1/2"	—	92147
3-4	5/16"	1-1/2"	—	92163
4-5	5/16"	1-1/2"	—	92165
6-8	5/16"	1-1/2"	—	92169
8-10	5/16"	1-1/2"	—	92171
10-12	5/16"	1-1/2"	—	92173
12-14	5/16"	1-1/2"	—	92175
14-16	5/16"	1-1/2"	—	92177

## Slotted Insert Bits

- Common household fastener type



92205

Pt. Size	Description	Shank	Overall Length	Carded Stock #	Bulk Stock #
#0	1 pc design	1/4"	1"	—	92201
#1	1 pc design	1/4"	1"	92203PK	92203
#2	1 pc design	1/4"	1"	92205PK	92205
#3	1 pc design	1/4"	1"	92207PK	92207

## Square Recess Insert Bits

- One piece design provides tight fit in the fastener recess
- Increasing in popularity for decking, drywall and cabinetry

# HANSON® INSERT BITS

## Square Recess Insert Bits



92225

- Two piece design provides ease of fastener engagement and disengagement
- Increasing in popularity for decking, drywall and cabinetry

Pt. Size	Description	Shank	Overall Length	Carded Stock #	Bulk Stock #
#0	2 pc design	1/4"	1"	92221PK	92221
#1	2 pc design	1/4"	1"	92223PK	92223
#2	2 pc design	1/4"	1"	92225PK	92225
#3	2 pc design	1/4"	1"	92227PK	92227

## TORX®\* Insert Bits



92333

- Common in automotive and computer industries

Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
T6	1/4"	1"	–	92306
T7	1/4"	1"	92309PK	92309
T8	1/4"	1"	92312PK	92312
T9	1/4"	1"	92315PK	92315
T10	1/4"	1"	92318PK	92318
T15	1/4"	1"	92321PK	92321
T20	1/4"	1"	92324PK	92324
T25	1/4"	1"	92327PK	92327
T27	1/4"	1"	92330PK	92330
T30	1/4"	1"	92333PK	92333
T40	1/4"	1"	92336PK	92336
T30	5/16"	1-1/4"	–	92361
T40	5/16"	1-1/4"	–	92365
T45	5/16"	1-1/4"	–	92369
T50	5/16"	1-1/4"	–	92377
T55	5/16"	1-1/4"	–	92381

## TORX Insert Bits – Tamper Resistant



92335

- Used in security applications including control panels, display cases and high tech equipment

Pt. Size	Shank	Overall Length	Bulk Stock #
T9	1/4"	1"	92317
T10	1/4"	1"	92320
T15	1/4"	1"	92323
T20	1/4"	1"	92326
T25	1/4"	1"	92329
T27	1/4"	1"	92332
T30	1/4"	1"	92335
T40	1/4"	1"	92338

\* TORX® is a registered trademark of Camcar Division of Textron, Inc.

# HANSON® INSERT BITS



92495

## Socket Head Insert Bits – Fractional

- Used commonly in furniture assembly, bicycle maintenance and manufacturing equipment

Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
.050"	1/4"	1-1/4"	–	92407
1/16"	1/4"	1-1/4"	–	92403
5/64"	1/4"	1-1/4"	–	92411
3/32"	1/4"	1-1/4"	92415PK	92415
7/64"	1/4"	1-1/4"	–	92419
1/8"	1/4"	1-1/4"	92423PK	92423
9/64"	1/4"	1-1/4"	–	92427
5/32"	1/4"	1-1/4"	92431PK	92431
3/16"	1/4"	1-1/4"	92437PK	92437
7/32"	1/4"	1-1/4"	92443PK	92443
1/4"	1/4"	1-1/4"	–	92451
5/16"	1/4"	1-1/4"	–	92467
3/8"	1/4"	1-1/4"	–	92483
5/32"	5/16"	1-1/4"	–	92489
3/16"	5/16"	1-1/4"	–	92491
7/32"	5/16"	1-1/4"	–	92493
1/4"	5/16"	1-1/4"	–	92495
5/16"	5/16"	1-1/4"	–	92497
3/8"	5/16"	1-1/4"	–	92499



92531

## Socket Head Insert Bits – Metric

- Used commonly in furniture assembly, bicycle maintenance and manufacturing equipment

Pt. Size	Shank	Overall Length	Bulk Stock #
2 mm	1/4"	1-1/4"	92507
3 mm	1/4"	1-1/4"	92509
4 mm	1/4"	1-1/4"	92511
5 mm	1/4"	1-1/4"	92513
6 mm	1/4"	1-1/4"	92515
8 mm	1/4"	1-1/4"	92517
3 mm	5/16"	1-1/4"	92525
4 mm	5/16"	1-1/4"	92527
5 mm	5/16"	1-1/4"	92529
6 mm	5/16"	1-1/4"	92531
8 mm	5/16"	1-1/4"	92533



92432

## Socket Head Insert Bits – Tamper Resistant

- Used in security applications including control panels, display cases and high tech equipment

Pt. Size	Shank	Overall Length	Bulk Stock #
1/8"	1/4"	1-1/4"	92425
5/32"	1/4"	1-1/4"	92432



# HANSON® INSERT BITS

## Clutch Type A Insert Bits

- Popular fastener type in mobile homes and truck trailers



92541

Pt. Size	Shank	Overall Length	Bulk Stock #
1/8"	1/4"	1"	92541
5/32"	1/4"	1"	92545
3/16"	1/4"	1"	92549

## Clutch Type G Insert Bits

- Popular fastener type in mobile homes and truck trailers



92543

Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
1/8"	1/4"	1"	–	92543
5/32"	1/4"	1"	92547PK	92547
3/16"	1/4"	1"	92551PK	92551
5/32"	5/16"	1"		92555

## TRI-WING®\* – Insert Bits

- Common fastener type in aviation and electronics industries



92536

Pt. Size	Shank	Overall Length	Bulk Stock #
#0	1/4"	1"	92534
#1	1/4"	1"	92535
#2	1/4"	1"	92536
#3	1/4"	1"	92537
#4	1/4"	1"	92538
#5	1/4"	1"	92539
#6	1/4"	1-1/4"	92540

## Spanner Insert Bits

- Used in security applications including control panels, display cases and high tech equipment

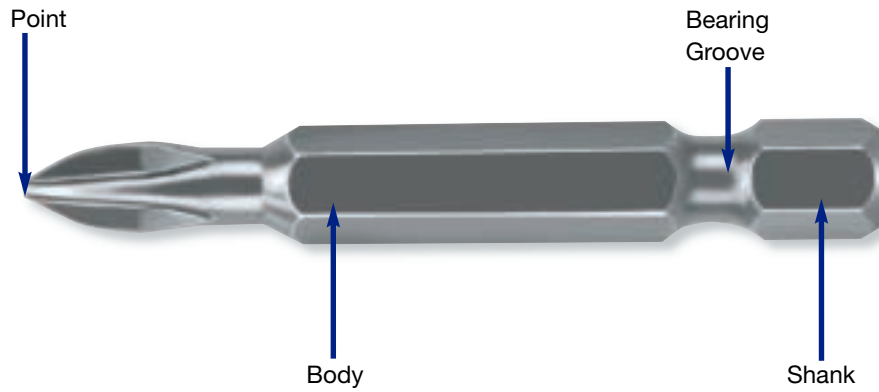


92585

Pt. Size	Shank	Overall Length	Bulk Stock #
#4	1/4"	1"	92563
#6	1/4"	1"	92565
#8	1/4"	1"	92567
#10	1/4"	1"	92569
#12	1/4"	1"	92571
#14	1/4"	1"	92573
#4	5/16"	1-1/2"	92579
#6	5/16"	1-1/2"	92581
#8	5/16"	1-1/2"	92583
#10	5/16"	1-1/2"	92585
#12	5/16"	1-1/2"	92587
#14	5/16"	1-1/2"	92589

\* TRI-WING® is a registered trademark of Phillips Screw Company

# HANSON® POWER BITS



Power bits are designed for the higher torque capabilities of power tools and allow more clearance between the power tool and fastener. Power bits fit directly into the power drill chuck or quick change chuck adapter. DO NOT place power bits in bit holding screwdrivers or power bit holders. The retaining ring in the bit holder is designed for insert bits only.



93007

## Phillips Power Bits

- Most popular fastener style. Used in most industries

Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
#1	1/4"	1-15/16"	93003PK	93003
#2	1/4"	1-15/16"	93007PK	93007
#3	1/4"	1-15/16"	93011PK	93011
◇ #3	1/4"	1-15/16"	—	93013
#1	1/4"	2-3/4"	—	93017
#2	1/4"	2-3/4"	—	93019
#3	1/4"	2-3/4"	—	93021
#1	1/4"	3"	—	93043
#2	1/4"	3"	—	93047
#3	1/4"	3"	—	93049
#1	1/4"	3-1/2"	93023PK	93023
#2	1/4"	3-1/2"	93025PK	93025
#3	1/4"	3-1/2"	93029PK	93029
#1	1/4"	4"	—	93053
#2	1/4"	4"	—	93057
#3	1/4"	4"	—	93059
#1	1/4"	6"	—	93063
#2	1/4"	6"	—	93067
#3	1/4"	6"	—	93069



93099

## Phillips 7/16" Hex Power Bits

- Most popular fastener style. Used in most industries

Pt. Size	Shank	Overall Length	Bulk Stock #
#2	7/16"	3-1/2"	93093
#3	7/16"	3-1/2"	93097
#4	7/16"	3-1/2"	93099
#2	7/16"	6"	93095

◇ = reduced diameter

# HANSON® POWER BITS

## Phillips Threaded Shank Power Bits



93084

- Most popular fastener style. Used in most industries

Pt. Size	Shank	Overall Length	Bulk Stock #
#2	10-32 Thread	1-1/2"	93085
#2	1/4-24 Thread	1-1/2"	93086
#2	5mm x 0.8 Thread	1-7/8"	93084

## POZIDRIV®\* Power Bits



93079

- Used commonly in the automotive industry

Pt. Size	Shank	Overall Length	Bulk Stock #
# 1	1/4"	2"	93073
# 2	1/4"	2"	93077
# 3	1/4"	2"	93079
# 1	1/4"	2-3/4"	93030
# 2	1/4"	2-3/4"	93031
# 3	1/4"	2-3/4"	93032
# 1	1/4"	3"	93033
# 2	1/4"	3"	93034
# 3	1/4"	3"	93035
# 1	1/4"	3-1/2"	93036
# 2	1/4"	3-1/2"	93037
# 3	1/4"	3-1/2"	93038
# 1	1/4"	6"	93039
# 2	1/4"	6"	93040
# 3	1/4"	6"	93041

## Frearson Power Bits



93481

- Frearson recess is the same across all fasteners - no differing point sizes

Shank	Overall Length	Bulk Stock #
1/4"	1-15/16"	93481
1/4"	6"	93483

# HANSON® POWER BITS



93111

## Slotted Power Bits

- Common household fastener type

Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
3-4	1/4"	1-15/16"	—	93103
4-5	1/4"	1-15/16"	—	93105
5-6	1/4"	1-15/16"	—	93107
6-8	1/4"	1-15/16"	93109PK	93109
8-10	1/4"	1-15/16"	93111PK	93111
10-12	1/4"	1-15/16"	93113PK	93113
12-14	1/4"	1-15/16"	—	93115
3-4	1/4"	2-3/4"	—	93123
4-5	1/4"	2-3/4"	—	93125
5-6	1/4"	2-3/4"	—	93127
6-8	1/4"	2-3/4"	—	93129
8-10	1/4"	2-3/4"	—	93131
10-12	1/4"	2-3/4"	—	93133
12-14	1/4"	2-3/4"	—	93135
3-4	1/4"	3"	—	93139
4-5	1/4"	3"	—	93141
5-6	1/4"	3"	—	93143
6-8	1/4"	3"	—	93145
8-10	1/4"	3"	—	93147
10-12	1/4"	3"	—	93149
12-14	1/4"	3"	—	93151
3-4	1/4"	3-1/2"	—	93155
4-5	1/4"	3-1/2"	—	93157
5-6	1/4"	3-1/2"	—	93159
6-8	1/4"	3-1/2"	93161PK	93161
8-10	1/4"	3-1/2"	93163PK	93163
10-12	1/4"	3-1/2"	93165PK	93165
12-14	1/4"	3-1/2"	—	93167
3-4	1/4"	6"	—	93173
4-5	1/4"	6"	—	93175
5-6	1/4"	6"	—	93177
6-8	1/4"	6"	—	93179
8-10	1/4"	6"	—	93181
10-12	1/4"	6"	—	93183
12-14	1/4"	6"	—	93185



93193

## Slotted Power Bits With Finder

- Common household fastener type

Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
5-6	1/4"	2-5/32"	—	93191
6-8	1/4"	2-5/32"	93193PK	93193
10-12	1/4"	2-5/32"	93195PK	93195

# HANSON® POWER BITS

## Square Recess Power Bits



93205

- One piece design provides tight fit in the fastener recess
- Increasing in popularity for decking, drywall and cabinetry

Pt. Size	Description	Shank	Overall Length	Carded Stock #	Bulk Stock #
#1	1 pc design	1/4"	1-15/16"	93203PK	93203
#2	1 pc design	1/4"	1-15/16"	93205PK	93205
#3	1 pc design	1/4"	1-15/16"	93207PK	93207
#1	1 pc design	1/4"	2-3/4"	–	93211
#2	1 pc design	1/4"	2-3/4"	–	93213
#3	1 pc design	1/4"	2-3/4"	–	93215
#1	1 pc design	1/4"	3"	–	93219
#2	1 pc design	1/4"	3"	–	93221
#3	1 pc design	1/4"	3"	–	93223
#1	1 pc design	1/4"	4"	–	93225
#2	1 pc design	1/4"	4"	–	93226
#3	1 pc design	1/4"	4"	–	93227
#1	1 pc design	1/4"	6"	–	93230
#2	1 pc design	1/4"	6"	–	93231
#3	1 pc design	1/4"	6"	–	93232

## Square Recess Power Bits



93239

- Two piece design provides ease of fastener engagement and disengagement
- Increasing in popularity for decking, drywall and cabinetry

Pt. Size	Description	Shank	Overall Length	Carded Stock #	Bulk Stock #
#0	2 pc design	1/4"	1 15/16"	93535PK	93235
#1	2 pc design	1/4"	1-15/16"	93237PK	93237
#2	2 pc design	1/4"	1-15/16"	93239PK	93239
#3	2 pc design	1/4"	1-15/16"	93241PK	93241
#1	2 pc design	1/4"	2-3/4"	–	93245
#2	2 pc design	1/4"	2-3/4"	–	93247
#3	2 pc design	1/4"	2-3/4"	–	93249
#1	2 pc design	1/4"	3"	–	93253
#2	2 pc design	1/4"	3"	–	93255
#3	2 pc design	1/4"	3"	–	93257
#1	2 pc design	1/4"	6"	–	93263
#2	2 pc design	1/4"	6"	–	93265
#3	2 pc design	1/4"	6"	–	93267



# HANSON® POWER BITS



93275

## Square Recess Threaded Shank Power Bits

- Increasing in popularity for decking, drywall and cabinetry

Pt. Size	Description	Shank	Overall Length	Bulk Stock #
#1	2 pc design	5 mm x 0.8 Thread	1-7/8"	93273
#2	2 pc design	5 mm x 0.8 Thread	1-7/8"	93275
#2	2 pc design	6 mm x 1.0 Thread	1-21/32"	93277
#2	1 pc design	6 mm x 1.0 Thread	1-5/8"	93279



93336

## TORX®\* Power Bits

- Common in automotive and computer industries

Pt. Size	Shank	Overall Length	Carded Stock #	Bulk Stock #
T6	1/4"	1-15/16"	—	93306
T7	1/4"	1-15/16"	—	93309
T8	1/4"	1-15/16"	—	93312
T9	1/4"	1-15/16"	—	93315
T10	1/4"	1-15/16"	93318PK	93318
T15	1/4"	1-15/16"	93321PK	93321
T20	1/4"	1-15/16"	93324PK	93324
T25	1/4"	1-15/16"	93327PK	93327
T27	1/4"	1-15/16"	93330PK	93330
T30	1/4"	1-15/16"	93333PK	93333
T40	1/4"	1-15/16"	—	93336



93411

## Socket Head Power Bits

- Used commonly in furniture assembly, bicycle maintenance and manufacturing equipment

Pt. Size	Shank	Overall Length	Bulk Stock #
1/16"	1/4"	1-15/16"	93403
5/64"	1/4"	1-15/16"	93405
3/32"	1/4"	1-15/16"	93407
7/64"	1/4"	1-15/16"	93409
1/8"	1/4"	1-15/16"	93411
9/64"	1/4"	1-15/16"	93413
5/32"	1/4"	1-15/16"	93415
3/16"	1/4"	1-15/16"	93419
7/32"	1/4"	1-15/16"	93423
1/4"	1/4"	1-15/16"	93427

\* TORX® is a registered trademark of Camcar Division of Textron, Inc.

# HANSON® POWER BITS

## Clutch Type A Power Bits

- Popular fastener type in mobile homes and truck trailers



93469

Pt. Size	Shank	Overall Length	Bulk Stock #
1/8"	1/4"	1-15/16"	93461
5/32"	1/4"	1-15/16"	93465
3/16"	1/4"	1-15/16"	93469
5/32"	1/4"	2-3/4"	93473
5/32"	1/4"	3-1/2"	93477

## Clutch Type G Power Bits

- Popular fastener type in mobile homes and truck trailers



93467

Pt. Size	Shank	Overall Length	Bulk Stock #
1/8"	1/4"	1-15/16"	93463
5/32"	1/4"	1-15/16"	93467
3/16"	1/4"	1-15/16"	93471
5/32"	1/4"	2-3/4"	93475
5/32"	1/4"	3-1/2"	93479

## Double End Bits

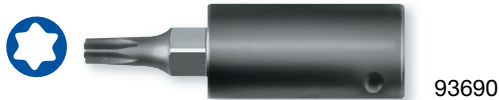
- Combines two of the most common screwdriver bits



93509

Description	Shank	Overall Length	Carded Stock #	Bulk Stock #
#1 Phillips/6-8 Slotted	1/4"	1-1/2"	–	93503
#2 Phillips/8-10 Slotted	1/4"	1-1/2"	–	93509
#3 Phillips/10-12 Slotted	1/4"	1-1/2"	93515PK	93515
#1 Phillips/6-8 Slotted	1/4"	2-3/8"	93521PK	93521
#2 Phillips/8-10 Slotted	1/4"	2-3/8"	93525PK	93525

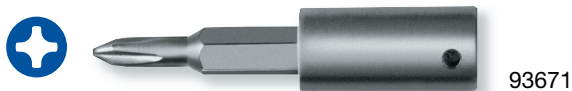
# HANSON® BIT HOLDERS SQUARE DRIVE & POWER



## Square Drive Holders With TORX®\* Bits

- Can be used with a socket wrench or socket adapter
- Common in automotive and computer industries

Pt. Size	Sq. Drive	Overall Length	Bulk Stock #
T7	1/4"	1-5/8"	93683
T8	1/4"	1-5/8"	93684
T9	1/4"	1-5/8"	93685
T10	1/4"	1-5/8"	93686
T15	1/4"	1-5/8"	93688
T20	1/4"	1-5/8"	93690
T25	1/4"	1-5/8"	93691
T27	1/4"	1-5/8"	93692
T30	1/4"	1-5/8"	93693
T40	3/8"	1-15/16"	93695
T45	3/8"	1-15/16"	93696
T50	3/8"	1-15/16"	93697



## Square Drive Holders With Phillips Bits

- Can be used with a socket wrench or socket adapter
- Most popular fastener style. Used in most industries

Pt. Size	Sq. Drive	Overall Length	Bulk Stock #
#1	1/4"	2-1/8"	93671
#2	1/4"	2-1/8"	93672
#2	3/8"	2-3/8"	93676
#3	3/8"	2-3/8"	93677
#4	3/8"	2-5/32"	93678



## Square Drive Bit Holders

- Designed for use with Insert Bits only
- Can be used with a socket wrench or socket adapter

Sq. Drive	Bit Size	Overall Length	Carded Stock #	Bulk Stock #
1/4"	1/4"	1"	93811PK	93811
3/8"	1/4"	1-1/4"	93813PK	93813
3/8"	5/16"	1-1/4"	—	93815
1/2"	5/16"	1-1/2"	—	93817

\* TORX® is a registered trademark of Camcar Division of Textron, Inc.

# HANSON® BIT HOLDERS

## SQUARE DRIVE & POWER

### 1/4" Hex Shank Bit Holders

- Designed for use with Insert Bits only



93718

	Description	Overall Length	Carded Stock #	Bulk Stock #
	Standard w/C-Ring	2-1/4"	–	93711
C	Standard w/C-Ring	2-1/4"	93712PK	93712
C	No C-Ring	2-1/4"	–	93714
C	Knurled	2-15/16"	–	93715
	Standard w/C-Ring	2-31/32"	–	93717
C	Standard w/C-Ring	2-31/32"	93718PK	93718
	Turned	2-31/32"	–	93720
C	Turned	2-31/32"	–	93721
C	No C-Ring	2-31/32"	–	93722
	Standard w/C-Ring	4"	–	93727
C	Standard w/C-Ring	4"	–	93728
	Standard w/C-Ring	6"	–	93729
C	Standard w/C-Ring	6"	–	93730
	Standard w/C-Ring	8"	–	93731
C	Standard w/C-Ring	8"	–	93732
	Standard w/C-Ring	10"	–	93733
C	Standard w/C-Ring	10"	–	93734
C	Standard w/C-Ring	12"	–	93736
C	Standard w/C-Ring	14"	–	93738

### 1/4" Hex Shank Bit Holders – For Use With 5/16" Hex Insert Bits

- Designed for use with Insert Bits only



93724

	Description	Overall Length	Bulk Stock #
	Turned	3"	93723
C	Turned	3"	93724

### 7/16" Hex Shank Bit Holders

- Designed for use with Insert Bits only



93741

	Description	Overall Length	Bulk Stock #
	for 1/4" Hex Insert Bit	2-3/4"	93741
	for 5/16" Hex Insert Bits	2-3/4"	93743
C	for 5/16" Hex Insert Bits	2-3/4"	93744

C = magnetic

# HANSON® SOCKETS



93608



93604

## Standard Sockets

- Ideal for use on hexagonal head screws
- Not for use in impact drivers

	Sq. Drive	Hex Drive	Body Style	Overall Length	Bulk Stock #
	1/4"	3/16"	Tapered	7/8"	93601
C	1/4"	3/16"	Tapered	7/8"	93602
	1/4"	1/4"	Tapered	7/8"	93603
C	1/4"	1/4"	Tapered	7/8"	93604
C	1/4"	1/4"	Straight	7/8"	93606
	1/4"	9/32"	Straight	7/8"	93638
C	1/4"	9/32"	Straight	7/8"	93639
	1/4"	5/16"	Straight	7/8"	93607
C	1/4"	5/16"	Straight	7/8"	93608
	1/4"	11/32"	Straight	1"	93640
C	1/4"	11/32"	Straight	1"	93641
	1/4"	3/8"	Straight	1"	93610
C	1/4"	3/8"	Straight	1"	93611
	1/4"	7/16"	Straight	1"	93612
C	1/4"	7/16"	Straight	1"	93614
	1/4"	1/2"	Straight	1"	93613
C	1/4"	1/2"	Straight	1"	93615
	3/8"	1/4"	Tapered	1-1/32"	93616
	3/8"	5/16"	Tapered	1-1/32"	93617
C	3/8"	3/8"	Straight	1-1/32"	93620
	3/8"	7/16"	Tapered	1-1/32"	93621
C	3/8"	7/16"	Straight	1-1/32"	93622
	3/8"	1/2"	Straight	1-1/32"	93623
C	3/8"	1/2"	Straight	1-1/32"	93624
	3/8"	9/16"	Straight	1-1/32"	93625
C	3/8"	9/16"	Straight	1-1/32"	93626
	3/8"	3/8"	Tapered	1-1/2"	93619
	1/2"	5/16"	Tapered	1-1/2"	93627
C	1/2"	5/16"	Tapered	1-1/2"	93628
C	1/2"	3/8"	Tapered	1-1/2"	93630
	1/2"	1/2"	Tapered	1-1/2"	93632
	1/2"	9/16"	Tapered	1-1/2"	93634
C	1/2"	9/16"	Tapered	1-1/2"	93635
C	1/2"	9/16"	Straight	1-1/2"	93637
	Thin Wall x 23/32" Nose Diameter				
C	1/2"	9/16"	Straight	1-1/2"	93633
	Thin Wall x 15/16" Nose Diameter				

C = magnetic



# HANSON® SOCKETS

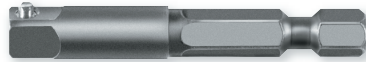
## Metric Sockets



- Ideal for use on hexagonal head screws
- Not for use in impact drivers

	Sq. Drive	Hex Drive	Body Style	Overall Length	Bulk Stock #
C	1/4"	5.5 mm	Tapered	22.2 mm	93643
	1/4"	6 mm	Tapered	22.2 mm	93644
C	1/4"	6 mm	Tapered	22.2 mm	93645
	1/4"	7 mm	Straight	22.2 mm	93646
C	1/4"	7 mm	Straight	22.2 mm	93647
	1/4"	8 mm	Straight	22.2 mm	93648
C	1/4"	8 mm	Straight	22.2 mm	93649
	1/4"	9 mm	Straight	25.4 mm	93650
C	1/4"	9 mm	Straight	25.4 mm	93651
	1/4"	10 mm	Straight	25.4 mm	93652
C	1/4"	10 mm	Straight	25.4 mm	93653
	1/4"	11 mm	Straight	25.4 mm	93654
C	1/4"	11 mm	Straight	25.4 mm	93655
	1/4"	12 mm	Straight	25.4 mm	93656
C	1/4"	12 mm	Straight	25.4 mm	93657
	1/4"	13 mm	Straight	25.4 mm	93658
C	1/4"	13 mm	Straight	25.4 mm	93659
C	3/8"	8 mm	Tapered	26.2 mm	93660
	3/8"	10 mm	Tapered	26.2 mm	93661
C	3/8"	10 mm	Tapered	26.2 mm	93662
	3/8"	11 mm	Tapered	26.2 mm	93663
C	3/8"	11 mm	Tapered	26.2 mm	93664
	3/8"	12 mm	Straight	26.2 mm	93665
C	3/8"	12 mm	Straight	26.2 mm	93666
C	3/8"	13 mm	Straight	26.2 mm	93667
	3/8"	14 mm	Straight	26.2 mm	93668
C	3/8"	14 mm	Straight	26.2 mm	93669

# HANSON® SOCKET ADAPTERS



93758

## Square Drive Socket Adapters

- Pin lock design for production applications. Ball retention design for quick change applications

Sq. Drive	Lock Type	Overall Length	Carded Stock#	Bulk Stock #
1/4"	Pin	1-3/8"	–	93755
1/4"	Ball	1-3/8"	–	93756
1/4"	Pin	2"	–	93758
1/4"	Ball	2"	93761PK	93761
1/4"	Pin	3"	–	93763
1/4"	Ball	3"	–	93765
1/4"	Pin	4"	–	93771
1/4"	Ball	4"	–	93773
1/4"	Ball	5"	–	93775
1/4"	Pin	6"	–	93776
1/4"	Ball	6"	–	93777
1/4"	Pin	8"	–	93779

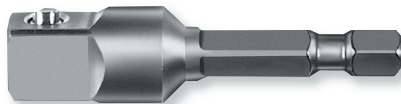


93751

## Hex Drive Socket Adapters

- Pin lock design for production applications.

Hex Drive	Lock Type	Overall Length	Bulk Stock #
1/4"	Pin	2"	93751
1/4"	Pin	2"	93752



93783

## Square Drive Socket Adapters

- Pin lock design for production applications. Ball retention design for quick change applications

Sq. Drive	Lock Type	Overall Length	Carded Stock#	Bulk Stock #
3/8"	Pin	1-5/8"	–	93781
3/8"	Ball	1-5/8"	–	93782
3/8"	Pin	2"	–	93783
3/8"	Ball	2"	93784PK	93784
3/8"	Pin	3"	–	93786
3/8"	Ball	3"	–	93787
3/8"	Pin	4"	–	93789
3/8"	Ball	4"	–	93790
3/8"	Pin	6"	–	93792
3/8"	Ball	6"	–	93793



93795

## Square Drive Socket Adapters

- Ball retention design for quick change applications

Sq. Drive	Lock Type	Overall Length	Bulk Stock #
1/2"	Ball	2"	93795
1/2"	Ball	3"	93797
1/2"	Ball	4"	93799

◇ = Full Hex

# HANSON® QUICK CHANGE CHUCK ADAPTERS

## Quick Change Chuck Adapters

- Allows quick and easy changing of power tool accessories
- Works with most 1/4" hex accessories with a bearing groove



93701

Description	Shank	Overall Length	Bulk Stock #
Quick Change Adapter	1/4"	1-13/16"	93701
Female Square Drive	3/8"	1-15/16"	93708
Threaded Shank	3/8:24	1-15/16"	93705
Threaded Shank	1/2:20	1-15/16"	93706

# HANSON® SETS

## Magnetic Base Insert Bit Sets



91933

- Magnetic base attaches to metal shelving, beams and tool boxes



91915

Contents (Quantity - if more than 1 each)	Total Pcs.	Bulk Stock #
Slotted - 4-5 (2) & 8-10 (2) and Phillips - #1, #2 (2) & #3	8	91913
Slotted - 4-5, 6-8, 8-10 & 10-12 and Phillips - #0, #1, #2 & #3	8	91915
Phillips - #1 (3) & #2 (3) and Reduced Diameter - #2 (2)	8	91917
Socket Head Insert Bit Set - 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16" & 3/8"	12	91919
Slotted - 4-5, 6-8 (2), 8-10 (2) & 10-12 (2) and Phillips - #1 (2), #2 (2) & #3	12	91921
Slotted - 4-5, 6-8, 8-10 & 10-12; Phillips - #0, #1, #2 & #3;	12	91923
Square Recess - #2 and TORX®* - T10, T15 & T30		
Square Recess - #0 (2), #1 (2), #2 (2) & #3 (2)	8	91925
TORX - T9, T10, T15, T20, T25, T27, T30 & T40	8	91927
TORX - T6, T7, T8, T9, T10, T15, T20, T25, T27, T30 (2) & T40	12	91929
Insert Bit Assortment - Magnetic Bit Holder, Slotted, Phillips, Square Recess, POZIDRIV®**, TORX, Socket Head and Clutch	38	91933
Combination Insert and Power Bit Assortment - Magnetic Bit Holder, Phillips and Slotted	38	91937

## UNI-KIT® Screwdriver/Insert Bit Sets



91905

- Includes storage handle screwdriver for hand driving applications and magnetic bit holder for use in a power tool

Contents (Quantity - if more than 1 each)	Total Pcs.	Bulk Stock #
Screwdriver; Bit Holder and Clutch, TORX, Slotted, Socket Head, Square Recess & Phillips Insert Bits	28	91905
Screwdriver; Bit Holder and TORX, Slotted & Phillips Insert Bits	23	91909

\* TORX® is a registered trademark of Camcar Division of Textron, Inc.

\*\*POZIDRIV® is a registered trademark of Phillips Screw Company

# HANSON® SETS

## Honeycomb Sets



91901

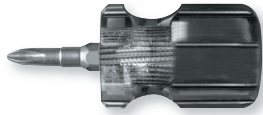
Contents (Quantity - if more than 1 each)	Total Pcs.	Bulk Stock #
Insert Socket Head Set - 2 mm, 3 mm, 4 mm, 5 mm, 6 mm & 8 mm	6	91893
Power Bit/Nutsetter Set - Phillips - #1 & #2; Slotted - 5-6 & 6-8 and Magnetic Nutsetter - 1/4", 5/16" & 3/8"	7	91894
Insert Socket Head Set - 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16" & 3/8"	12	91895
5/16" Hex Insert Socket Head Set - 5/32", 3/16", 7/32", 1/4", 5/16" & 3/8"	6	91896
Power Bit Set - Phillips - #1, #2 (2) & #3 and Slotted - 6-8 (2) & 8-10 (2)	8	91899
Insert Nutsetter/Power Bit Set - Nutsetter - 3/16", 1/4", 9/32", 5/16", 11/32", 3/8" & 7/16"; Phillips - #1, #2 and Slotted - 6-8 & 8-10	11	91901
Bit Holder/Insert Bit Set - 1/4" Magnetic Bit Holder; Phillips - #0, #1 (2), #2 (4) & #3 (2) and Slotted - 4-5, 6-8 (2), 8-10 (2) & 12-14 (2)	17	91902
Non-Magnetic Nutsetter Set - 1-7/8" OL - 1/4", 1/4" Tapered, 5/16", 3/8", 7/16" & 2-9/16" OL - 1/4", 5/16", 3/8" & 7/16"	9	91903
Insert Bit/Magnetic Bit Holder Set - Phillips - #1 (3), #2 (8) & #3 (3); Slotted - 4-5 (2), 6-8 (2) & 8-10 (2); Socket Head - 1/16" - 3/8" and Magnetic Bit Holder	36	91904
Power Bit/Socket Adapter/Nutsetter Set - Phillips - #1, #2 & #3; 1/4" Socket Adapter; 1/4" Magnetic Nutsetter; and Slot With Finder - 5-6, 6-8 & 10-12	8	91912
Power Nutsetter/Power Bit Set - Nutsetter (1-7/8" OL) - 1/4", 5/16" & 3/8" and Phillips - #1, #2 & #3	6	91975
<b>C</b> Power Nutsetter Set (1-7/8" OL) - Phillips Power Bit - #2 and Nutsetter - 1/4", 5/16" & 3/8"	4	91990
<b>C</b> Power Nutsetter/Power Bit Set - Nutsetter - 1/4", 5/16" & 3/8"; Square Recess - #1, #2 & #3 and Phillips - #2	7	91991
<b>C</b> Power Nutsetter Set (2-9/16" OL) - Square Recess Bit - #2 and Nutsetter - 1/4", 5/16" & 3/8"	4	91992
<b>C</b> Power Nutsetter Set (2-9/16" OL) - Phillips Power Bit - #2 and Nutsetter - 1/4", 5/16" & 3/8"	4	91995
<b>C</b> Power Bit Set - Slotted with Finder - 5-6, 6-8 & 10-12 and Phillips - #1, #2 & #3	6	91953
Power Bit Set - Phillips - #1 (2), #2 (5) & #3 (2) and Slotted - 4-5 (2), 6-8 (2), 8-10 (2) & 12-14 (2)	17	91994

**C** = magnetic

OL = Overall Length



# HANSON® SCREWDRIVERS



93973

## 2 In 1 Screwdrivers With Double End Bits

- Quickly change between two of the most common bit types

Description	Overall Length	Bulk Stock #
Screwdriver with #2 Phillips/#3 Phillips Bit	3"	93973
Screwdriver with 4-5 Slotted/12-14 Slotted Bit	3"	93975
Screwdriver with #1 Phillips/#2 Phillips Bit	3"	93977
Screwdriver with #2 Phillips/10-12 Slotted Bit	3"	93979



93986

## 4 In 1 Mini Screwdrivers With Double End Bits

- Quickly change between four of the most common bit types
- Compact design

Description	Overall Length	Bulk Stock #
Mini Screwdriver with #1 Phillips/4-5 Slotted & #2 Phillips/6-8 Slotted Bits	4-3/4"	93986



93991

## 4 In 1 Screwdrivers With Double End Bits

- Quickly change between four of the most common bit types
- Custom imprint available on 93991 model

Description	Overall Length	Carded Stock #	Bulk Stock #
Screwdriver (Red) with #1 Phillips/#2 Phillips & 4-5 Slotted/12-14 Slotted Bits	7-1/2"	93991PK	93991
Screwdriver with #2 Phillips/#3 Phillips & 4-5 Slotted/12-14 Slotted Bits	7-1/2"	—	93995
Screwdriver (Blue) with 4-5 Slotted/12-14 Slotted & #1 Phillips/#2 Phillips Bits	7-1/2"	—	93987



93981

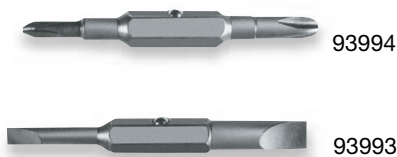
## 6 In 1 Screwdriver With Double End Bits

- Quickly change between four of the most common bit types
- Also can be used as a 1/4" and 5/16" nutdriver

Description	Overall Length	Bulk Stock #
Screwdriver with #1 Phillips/6-8 Slotted & #2 Phillips/10-12 Slotted Bits	7-1/2"	93981

# HANSON® SCREWDRIVERS

## Double End Replacement Bits For Screwdriver Sets



Description	Overall Length	Bulk Stock #
#1 Phillips/4-5 Slotted Bit for use with Mini 4 in 1 Screwdrivers	1-1/2"	93988
#2 Phillips/6-8 Slotted Bit for use with Mini 4 in 1 Screwdrivers	1-1/2"	93989
#1 Phillips/6-8 Slotted Bit for use with 6 in 1 Screwdrivers	2-1/2"	93983
#1 Phillips/#2 Phillips Bit for use with 2 in 1 and 4 in 1 Screwdrivers	2-3/4"	93993
4-5 Slotted/12-14 Slotted Bit for use with 2 in 1 and 4 in 1 Screwdrivers	2-3/4"	93994
#2 Phillips/#3 Phillips Bit for use with 2 in 1 and 4 in 1 Screwdrivers	2-3/4"	93997
#2 Phillips/10-12 Slotted Bit for use with 2 in 1, 4 in 1 and 6 in 1 Screwdrivers	2-3/4"	93998

## Bit Holding Screwdrivers

- Can be used with most 1/4" Hex insert bits



Description	Overall Length	Bulk Stock #
Bit Holding Stubby Screwdriver	2"	93927
C Bit Holding Stubby Screwdriver	2-3/8"	93929
C Bit Holding Screwdriver	9-1/2"	93925

## Bit Holding Screwdriver – Ratcheting Storage Handle

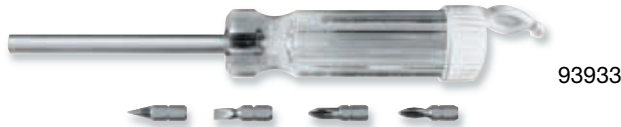
- Can be used with most 1/4" Hex insert bits
- Ratcheting design keeps the bit constantly engaged in the fastener
- Capacity to store up to 9 insert bits



Contents	Total Pcs.	Overall Length	Bulk Stock #
Ratcheting Screwdriver with Phillips - #1, #2 & Slotted - 5-7, 8-10 Bits	5	8-3/4"	93970

C = magnetic

# HANSON® SCREWDRIVERS & NUTDRIVERS



## Bit Holding Screwdrivers – Storage Handle

- Capacity to store up to 9 insert bits

	Contents	Total Pcs.	Overall Length	Carded Stock #	Bulk Stock #
C	Screwdriver without Bits	1	7-5/16"	93936PK	93936
C	Screwdriver with Phillips - #1 & #2 and Slotted - 5-7 & 8-10	5	7-9/16"	93933PK	93933
C	Screwdriver with Square Recess- #1 & #2; Clutch G - 5/32"; Slotted - 8-10 and Phillips - #2	6	7-9/16"	–	93941
C	Screwdriver with TORX®* - T15, T20, T25, T30 & T40	6	7-9/16"	93943PK	93943
C	Screwdriver with TORX - T9, T10, T15, T20, T30 & T40	7	7-9/16"	–	93947
C	Screwdriver with Phillips - #1 & #2; Slotted - 5-7 & 8-10 and TORX - T15	6	7-9/16"	–	93949
C	Screwdriver with Square Recess - #1 & #2 and Clutch G - 5/32" & 3/16"	5	7-9/16"	–	93967
C	Screwdriver with TORX - T8, T10, T15, T20 & T25	6	7-9/16"	–	93968
C	Screwdriver with Phillips - #1 & #2 and Slotted - 5-7 & 8-10	5	11-1/16"	–	93937
C	Screwdriver without Bits	1	11-1/16"	–	93939



## Marine Screwdrivers And Bits

- Corrosion-resistant plated insert bits
- Capacity to store up to 9 insert bits

	Description	Bulk Stock #
C	Bit Holding Storage Handle Screwdriver with Phillips - #1, #2 & #3; Slotted - 6-8, 10-12 and Frearson - #2	93951
C	Bit Holding Storage Handle Screwdriver without Bits	93964
<b>REPLACEMENT BITS:</b>		
	#1 Phillips	93957
	#2 Phillips	93958
	#3 Phillips	93959
	#2 Frearson	93960
	6-8 Slotted	93961
	10-12 Slotted	93962
<b>REPLACEMENT BIT SET:</b>		
	6 pc. Set (1 each)	93955

C = magnetic

\* TORX® is a registered trademark of Camcar Division of Textron, Inc.

# HANSON® SCREWDRIVERS & NUTDRIVERS

## TORX®\* Screwdrivers



93861

Pt. Size	Overall Length	Bulk Stock #
T6	6-3/4"	93853
T7	6-3/4"	93855
T8	6-3/4"	93857
T9	6-3/4"	93859
T10	6-3/4"	93861
T15	6-7/8"	93863
T20	7-1/8"	93865
T25	7-1/2"	93867
T27	7-5/8"	93869
T30	8-1/8"	93871
T40	7-1/4"	93875
T45	7-1/8"	93877
T50	7-7/8"	93879

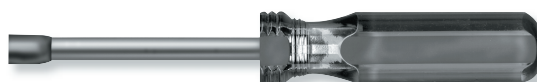
## Clutch Type G Screwdrivers



93883

Pt. Size	Overall Length	Bulk Stock #
5/32	7-3/4"	93883
3/16	7-3/4"	93885

## Nutdrivers – Hollow Shaft



93895

Hex Drive	Overall Length	Bulk Stock #
3/16"	6-1/2"	93891
1/4"	6-1/2"	93892
5/16"	6-1/2"	93893
11/32"	6-5/8"	93894
3/8"	6-5/8"	93895
7/16"	6-5/8"	93896
1/2"	6-5/8"	93897

## Nutdriver Sets

Contents	Total Pcs.	Bulk Stock #
1/4", 5/16", 3/8", 7/16", 1/2"	5	93898
3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2"	7	93899

# HANSON® SPECIALTY TOOLS & SETS



93533



93543

## Specialty Tools

- Ceiling tile hanger driver specially designed for use with lag screws in ceiling tile installation

Description	Overall Length	Bulk Stock #
Air Conditioning Service Valve Tool	2-1/4"	93533
1/4" Ceiling Tile Hanger Driver 1/4 Hex	2-21/32"	93543
5/16" Ceiling Tile Hanger Driver 1/4 Hex	2-21/32"	93545
CHIPWAND® Magnetic Chip Remover	4-3/4"	93550



91907

## Specialty Sets

Contents (Quantity - if more than 1 each)	Total Pcs.	Bulk Stock #
UNI-KIT® Gunsmith Set - Screwdriver; Bit Holder; Extension Adapter and Slotted, Phillips & Socket Head Insert Bits	29	91907
RV-MH Bit Set - Slotted - 8-10; Phillips - #2; Square Recess - #1 & #2 and Clutch G - 5/32"	6	91963
Ratcheting Bit Holding Screwdriver and Insert Nutsetter Set - 3/16", 1/4", 9/32", 5/16", 11/32", 3/8" & 7/16"; Ratcheting Screwdriver with Phillips - #1 & #2 and Slotted - 5-7 & 8-10	12	91908



# HANSON® SPECIALTY TOOLS & SETS

## Bit Box Sets – With 1/4" Hex Magnetic Bit Holder

- Set base can be used as a hand driver by inserting the bit holder in the top



91943

Contents (Quantity - if more than 1 each)	Total Pcs.	Bulk Stock #
Slotted - 4-5, 8-10 & 12-14; Phillips - #1, #2 & #3; TORX®* - T15; Square Recess - #2; Socket Head - 1/8" and Bit Holder	10	91941
Slotted - 8 -10; Phillips - #1, #2 & #3; TORX - T10 & T15; Square Recess - #1, #2 & #3 and Bit Holder	10	91943
Phillips Reduced Diameter - #2 (9) and Bit Holder	10	91945
Slotted - 4-5 & 8-10; Phillips - #1, #2 & #3; TORX - T10; Square Recess - #1 & #2; Clutch G - 5/32" and Bit Holder	10	91947



93492PK



92601PK

## Combination Packages – Carded

Description	Carded Stock #
Power Bit Combo Pack - Phillips - #1 and Slotted - 6-8	93491PK
Power Bit Combo Pack - Phillips - #2 and Slotted - 10-12	93492PK
Power Bit Combo Pack - Phillips - #1 and Phillips - #2	93490PK
Insert Bit Combo Pack - Phillips #1 & #2 and Slotted - 6-8 & 10-12	92600PK
Magnetic Holder Combo Pack - Phillips - #1 & #2 ; Slotted Insert Bit - 6-8 & 10-12 and Magnetic Bit Holder - 2-1/4"	92601PK

# Accessories

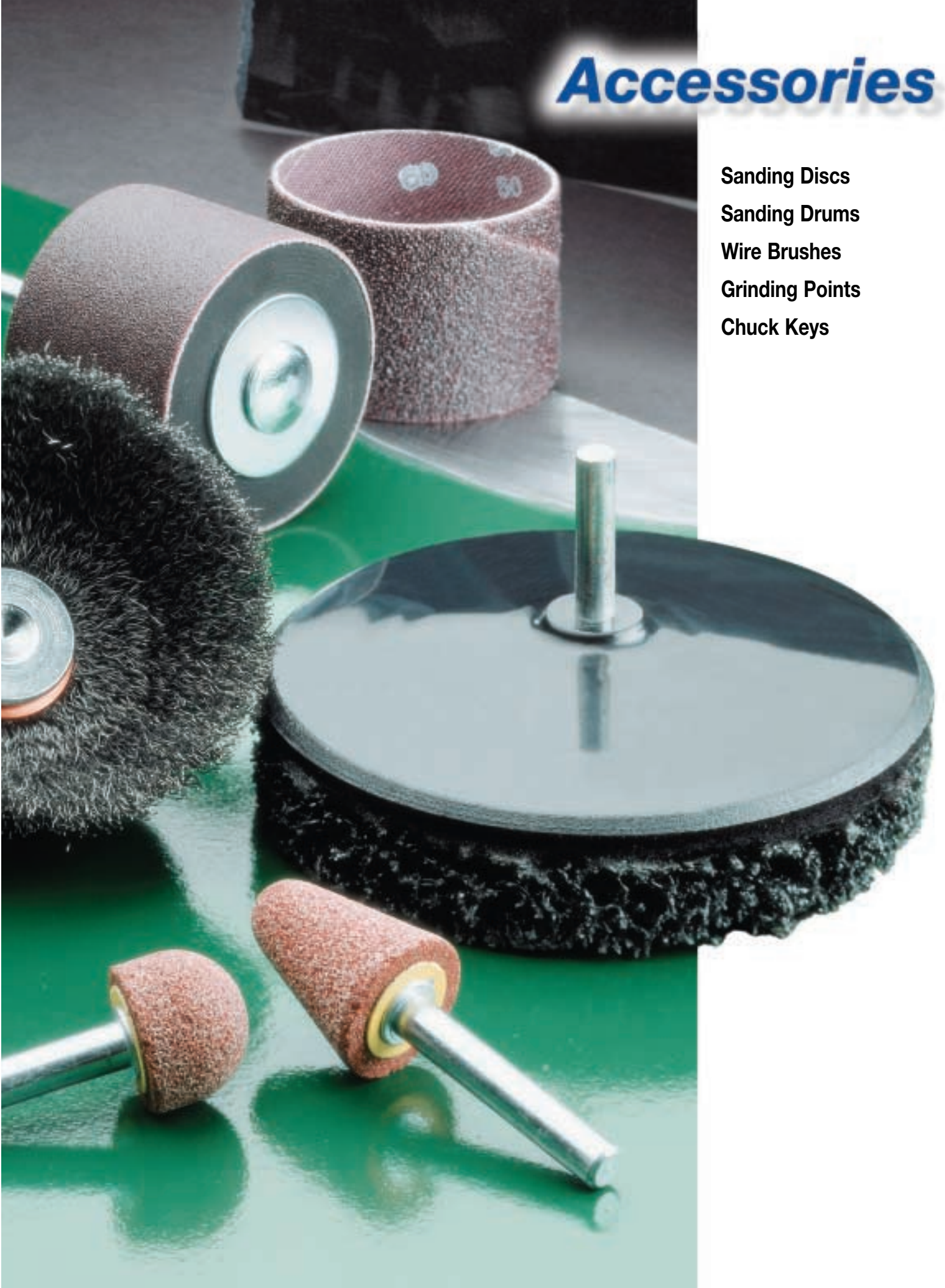
Sanding Discs

Sanding Drums

Wire Brushes

Grinding Points

Chuck Keys



# FACE-OFF™ SANDING DISCS

Paint • Rust • Graffiti Removal



## Job Applications



- Paint removal
- Graffiti removal
- Surface preparation



- Rust removal
- Plastic edging
- Aluminum trailers and boats



- Fiberglass boats
- Epoxy paint removal
- Surface conditioning and refinishing



- Remove light weld spatter

## Tool Applications



- Hand electric drills



- Angle grinders



- Bench grinders



- Hand air tools

## Single Disc (Sleeve of 5 Discs)

Diameter	Carded Stock #	Bulk Stock #
2-1/2" / 63 mm	-	70701
4" / 100 mm	-	70702
5" / 125 mm	-	70703
6" / 150 mm	-	70704
7" / 180 mm	-	70705

## Single Disc with Fixed Arbor



Diameter	Arbor Size	Carded Stock #	Bulk Stock #
4" / 100 mm	1/4" / 6 mm	70606	-
5" / 125 mm	1/4" / 6 mm	70607	-

## Double Disc with Fixed Arbor



Diameter	Arbor Size	Carded Stock #	Bulk Stock #
2-1/2" / 63 mm	1/4" / 6 mm	70608	-
4" / 100 mm	1/4" / 6 mm	70609	-
5" / 125 mm	1/4" / 6 mm	70610	-



# FACE-OFF™ SANDING DISCS

## Hook and Loop Disc

Diameter	Carded Stock #	Bulk Stock #
4" / 100 mm	70616	-
5" / 125 mm	70617	-
6" / 150 mm (sleeve of 5 discs)	-	70718

## Hook and Loop Disc with Arbor Pad

Diameter	Arbor Size	Carded Stock #	Bulk Stock #
4" / 100 mm	1/4" / 6 mm	70619	-
5" / 125 mm	1/4" / 6 mm	70620	-



## Hook and Loop Arbor Pad

Diameter	Arbor Size	Carded Stock #	Bulk Stock #
4" / 100 mm	1/4" / 6 mm	70621	-
5" / 125 mm	1/4" / 6 mm	70622	-

## Cup Wheels for Angle Grinders

Diameter	Bore Size	Carded Stock #	Bulk Stock #
3-1/2" / 90 mm for 4" Grinders	5/8" / 16 mm	70611	-
4" / 100 mm for 4-1/2" Grinders	7/8" / 22 mm	70612	-
4-1/2" / 115 mm for 5" Grinders	7/8" / 22 mm	70613	-
6" / 150 mm for 7" Grinders (sleeve of 5 cup wheels)	7/8" / 22 mm	-	70714
7" / 180 mm for 9" Grinders (sleeve of 5 cup wheels)	7/8" / 22 mm	-	70715



## Universal Spindle (Pouch of 10 Spindles)

Diameter	Arbor Size	Carded Stock #	Bulk Stock #
Spindle - Industrial (for 4" to 7" discs)	1/4" / 6 mm	-	70723
Spindle - Shank Arbor (for 2-1/2" to 5" discs)	5/16" / 8 mm	-	70724



# HANSON® ACCESSORIES

## Sanding Discs

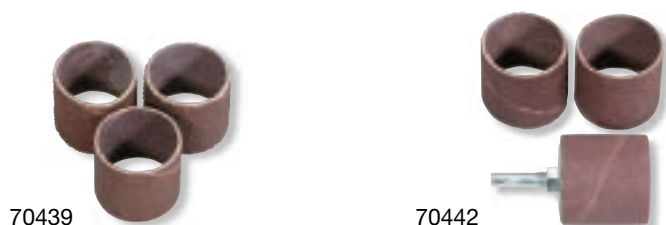
- Cloth-backed for long life
- Premium resin bond
- Aluminum oxide grit
- Sanding discs have stick on adhesion



Description	Carded Stock #
5" Universal Pad	70401
5" Sanding and Polishing Kit	70402
5" Polishing Bonnet	70403
5" Resin Cloth Coarse Refill	70404
5" Resin Cloth Medium Refill	70405
5" Resin Cloth Fine Refill	70406

## Sanding Drums

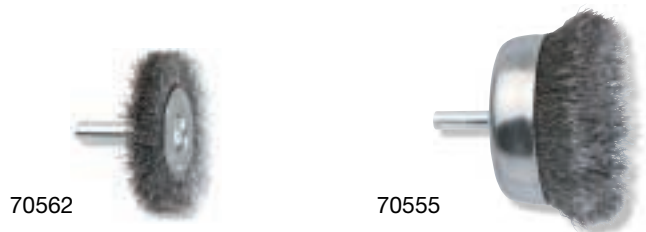
- Each kit contains drum and three refills - coarse, medium and fine grits
- Refill packs contain one each - coarse, medium and fine grit
- Grit resin bonded to cloth



Description	Carded Stock #
Kit - 3/4" x 1"	70431
Refills - 3/4" x 1"	70434
Kit - 1" x 1"	70436
Refills - 1" x 1"	70439
Kit - 1-1/2" x 1-1/2"	70442
Refills - 1-1/2" x 1-1/2"	70445
Kit - 2" x 1-1/2"	70448
Refills - 2" x 1-1/2"	70451

## Wire Brushes

- Removes rust, paint and burrs on wood, metal and plastic
- Crimped carbon steel wire
- Wire wheel brushes work best on contoured and irregular surfaces
- Wire cup brushes work best on large flat surfaces
- Encapsulated 2" wheel has tempered wire for deburring, edge bending, cleaning and surface finishing



Description	Diameter	Shank	Carded Stock #
Fine Cup	1-1/2"	1/4"	70551
Coarse Cup	1-1/2"	1/4"	70552
Fine Cup	2-1/2"	1/4"	70555
Coarse Cup	2-1/2"	1/4"	70556
Fine Wheel	1-1/2"	1/4"	70559
Fine Wheel	2"	1/4"	70562
Coarse Wheel	2"	1/4"	70563
Fine Wheel	3"	1/4"	70566
Coarse Wheel	3"	1/4"	70567
Fine Wheel	4"	1/4"	70569
Coarse Wheel	4"	1/4"	70570
Encapsulated Wheel	4"	1/4"	70572



# HANSON® ACCESSORIES

## Grinding Points



Description	Thickness	Diameter	Shank	Carded Stock #
Round Pointed Tree	1-1/8" / 29 mm	3/4" / 19 mm	1/4"	70501
Pointed Tree	1-1/4" / 32 mm	11/16" / 17 mm	1/4"	70504
Half Ball	5/8" / 16 mm	3/4" / 19 mm	1/4"	70507
Round Ball	5/8" / 16 mm	5/8" / 16 mm	1/4"	70510
Cup	3/4" / 19 mm	1" / 26 mm	1/4"	70513
Pointed Edge	1/4" / 6 mm	1-1/4" / 32 mm	1/4"	70516
Pointed Cylinder	7/8" / 22 mm	11/16" / 17 mm	1/4"	70519
Hollow Cylinder	3/4" / 19 mm	3/4" / 19 mm	1/4"	70522
Wheel	3/8" / 10 mm	1" / 26 mm	1/4"	70525
Wheel	1/4" / 6 mm	1-1/4" / 32 mm	1/4"	70528
Cylinder	3/4" / 19 mm	1/4" / 6 mm	1/4"	70531
Cylinder	1-1/4" / 32 mm	3/4" / 19 mm	1/4"	70534

- For grinding and shaping metal
- Aluminum oxide in vitrified bond for fast removal of metal



65597

## Grinding Point Display

Description	Contents	Bulk Stock #
50 pc Display	5 each: Round Pointed Tree, Pointed Tree, Half Ball, Round Ball, Cup, Pointed Edge, Pointed Cylinder, Hollow Cylinder, Wheel, Cylinder	65597

# HANSON® ACCESSORIES

## Chuck Keys - T-Type



Chuck Key Size	Pilot	Carded Stock #	Bulk Stock #
1/4" and 3/8"	–	70470	–
1/4" and 3/8"	1/4"	70471	–
1/4" and 3/8"	15/64"	70473	70473 B
1/2"	5/32"	70474	70474 B
3/8" and 1/2"	9/32"	70475	–
3/8" and 1/2"	1/4"	70476	70476 B
3/8"	1/4"	70478	–
1/4"	7/32"	70479	70479 B
1/2" and 5/8"	5/16"	70480	70480 B
K4 Chuck Key	–	–	70481 B

## Chuck Keys - Bent Type



Description	Pilot	Carded Stock #
1/4" and 3/8"	1/4"	70472
3/8" and 1/2"	9/32"	70477
Chuck Key Holder	–	70490

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
01	1-3	24HP-762	8-5	122/4	3-16	300/12	3-28	1021	14-2	1306	14-3
0102L3	1-3	24HP-914	8-5	132/10	3-17	300/14	3-28	1024	14-2	1312	14-3
0110-D	3-22	25	1-6	132/15	3-17	300/18	3-28	1025	14-2	1313	14-3
01442L3	1-3	25B	3-5	132/20	3-17	300/24	3-28	1026	14-2	1320	14-3
01542L3	1-3	25VSB	3-5	132/30	3-17	300/36	3-28	1028	14-2	1321	14-3
01642L3	1-3	27	1-7	132/40	3-17	350/8	3-28	1031	14-2	1323	14-3
02	1-4	28	1-5	132/50	3-17	350/10	3-28	1032	14-2	1324	14-3
020C	3-22	29	1-7	132/60	3-17	350/12	3-28	1033	14-2	1325	14-3
0220-D	3-22	30	1-5	132/80	3-17	350/14	3-28	1034	14-2	1327	14-3
03	1-3	31	1-5	132/100	3-17	350/18	3-28	1035	14-2	1329	14-3
0302L3	1-3	36	1-8	132/150	3-17	350/24	3-28	1036	14-2	1331	14-3
04	1-4	36B	3-6	133/20	3-18	350/36	3-28	1080KB	1-8	1334	14-3
04R	3-20	36VSB	3-6	133/25	3-18	350/48	3-28	1102	14-2	1336	14-3
05	1-2	37	1-8	133/30	3-18	413	3-7	1102L3	1-2	1339	14-3
0502L3	1-2	40-07	1-9	133/40	3-18	414	3-7	1104	14-2	1340	14-3
05R	3-20	40-08	1-9	133/50	3-18	506	2-2	1105	14-2	1344	14-3
060-1/2	3-21	40-137	1-9	133/60	3-18	506QC	2-1	1106	14-2	1345	14-3
07	1-2	40-21	1-9	133/80	3-18	512	2-2	1107	14-2	1346	14-3
0702L3	1-2	40-22	1-9	133/100	3-18	512QC	2-1	1108	14-2	1348	14-3
073-C	3-22	40-34	1-9	135/1	3-16	518	2-2	1109	14-2	1349	14-3
07R	3-20	40-50	1-9	135/2	3-16	518QC	2-1	1111	14-2	1352	14-3
08	1-4	40-51	1-9	135/3	3-16	524	2-2	1112	14-2	1354	14-3
09	1-2	40-52	1-9	135/4	3-16	524QC	2-1	1113	14-2	1356	14-3
0902L3	1-2	40-91	1-9	135/5	3-16	536	2-2	1116	14-2	1357	14-3
09-1/2	3-21	40-92	1-9	135/6	3-16	536QC	2-1	1117	14-2	1358	14-3
1B	3-3	40EXT	1-9	135/7	3-16	546	2-2	1118	14-2	1360	14-3
1SB	3-8	40REP	1-9	136/5	3-17	550	2-2	1119	14-2	1361	14-3
1TON-E-VSB	3-4	45/2-12	3-30	136/6	3-17	550QC	2-1	1120	14-2	1363	14-3
3B	3-3	52-1/2ED	3-11	136/7	3-17	556	2-4	1121	14-2	1365	14-3
3SB	3-8	52ED	3-11	136/9	3-17	570L3	2-7	1124	14-2	1366	14-3
3TON-3VSB	3-4	53ED	3-11	136/11	3-17	571L3	2-7	1125	14-2	1367	14-3
3VSB	3-3	55B	3-8	142HP-343	8-5	577	2-4	1126	14-2	1402L3	1-3
4B	3-3	68	1-8	144	1-3	582	3-32	1126HP-300	8-3	1406	14-3
4SB	3-8	71	1-8	154	1-3	590L3	2-6	1128	14-2	1412	14-3
5B	3-3	73	1-8	157-24HP-533	8-5	592	3-32	1130HP-325	8-3	1413	14-3
5SB/84-34SB	3-8	74	1-8	164	1-3	592-1/2	3-32	1131	14-2	1420	14-3
5TON-5VSB	3-4	75B	3-7	165	1-5	757KB	1-8	1132	14-2	1421	14-3
5VSB	3-3	84-34B	3-6	165/18	3-12	766PHP-375	8-1	1133	14-2	1423	14-3
6/8/36SB	3-8	84-34VSB	3-6	166PHP-375	8-3	766PHP-500	8-1	1134	14-2	1424	14-3
6B	3-3	92C	3-31	172P-330	8-5	778	3-21	1135	14-2	1425	14-3
6TON-6VSB	3-4	92-1/2C	3-31	181C	3-31	778-D	3-22	1136	14-2	1427	14-3
6VSB	3-3	93-1/2C	3-31	182C	3-31	788UHP-500	8-1	1136HP-300	8-3	1429	14-3
8B	3-3	99UHP-335J	8-3	183C/8	3-31	788UHP-650	8-1	1202	14-2	1431	14-3
8VSB	3-3	102	3-30	188UHP-350	8-3	799UHP-650	8-1	1204	14-2	1434	14-3
10	1-2	103	3-30	188UHP-500	8-3	930	3-24	1205	14-2	1436	14-3
10-456	4-4	106-150	8-4	188UHP-650	8-3	930F	3-25	1206	14-2	1439	14-3
11	1-2	108-150	8-4	200-22	3-29	930H	3-25	1207	14-2	1440	14-3
11B	3-8	112	3-6	200-30C	3-29	936	3-24	1208	14-2	1444	14-3
12	1-3	114	3-6	200-45	3-29	936F	3-25	1209	14-2	1445	14-3
12L3	1-3	119/1	3-14	202R	3-30	936H	3-25	1211	14-2	1446	14-3
13	1-2	119/2	3-14	203R	3-30	942	3-24	1212	14-2	1448	14-3
13J	8-4	119/2-1/2	3-14	204R	3-30	942F	3-25	1213	14-2	1449	14-3
14	1-3	120/2	3-14	210R	3-32	942H	3-25	1216	14-2	1452	14-3
15	1-3	120/3	3-14	211	1-5	1002	14-2	1217	14-2	1454	14-3
15B	3-8	120/4	3-14	211R	3-32	1002L3	1-2	1218	14-2	1456	14-3
16	1-3	120/6	3-14	218HP-300	8-4	1004	14-2	1219	14-2	1457	14-3
17	1-5	120/8	3-14	224HP-610	8-5	1005	14-2	1220	14-2	1458	14-3
18	1-5	120/10	3-14	224HP-762	8-5	1006	14-2	1221	14-2	1460	14-3
18HP-317	8-4	120/12	3-14	224HP-914	8-5	1007	14-2	1224	14-2	1461	14-3
19	1-5	121/3	3-15	226	1-6	1008	14-2	1225	14-2	1463	14-3
20	1-5	121/4	3-15	233C	3-29	1009	14-2	1226	14-2	1465	14-3
21	1-5	121/6	3-15	234C	3-29	1011	14-2	1228	14-2	1466	14-3
22	1-5	121/8	3-15	236C	3-29	1012	14-2	1231	14-2	1467	14-3
23	1-7	121/10	3-15	240	3-29	1013	14-2	1232	14-2	1502L3	1-3
23B	3-5	121/12	3-15	248	1-4	1016	14-2	1233	14-2	1506	14-3
23VSB	3-5	121W/3	3-15	251	1-7	1017	14-2	1234	14-2	1512	14-3
24	1-6	121W/4	3-15	275	1-5	1018	14-2	1235	14-2	1513	14-3
24HP-533	8-5	121W/6	3-15	300/8	3-28	1019	14-2	1236	14-2	1520	14-3
24HP-610	8-5	121W/8	3-15	300/10	3-28	1020	14-2	1302L3	1-2	1521	14-3

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
1523	14-3	1834	14-4	2513	14-2	2752	14-4	3612	14-18	4227	14-19
1524	14-3	1837	14-4	2516	14-2	2755	14-4	3613	14-18	4229	14-19
1525	14-3	1838	14-4	2517	14-2	2756	14-4	3615	14-18	4234	14-19
1527	14-3	1839	14-4	2518	14-2	2759	14-4	3620	14-18	4236	14-19
1529	14-3	1840	14-4	2519	14-2	2761	14-4	3621	14-18	4239	14-19
1531	14-3	1841	14-4	2520	14-2	2764	14-4	3623	14-18	4240	14-19
1534	14-3	1842	14-4	2521	14-2	2765	14-4	3625	14-18	4244	14-19
1536	14-3	1844	14-4	2524	14-2	2768	14-4	3627	14-18	4245	14-19
1539	14-3	1849	14-4	2525	14-2	2769	14-4	3629	14-18	4248	14-19
1540	14-3	1852	14-4	2526	14-2	3000	16-7	3631	14-18	4249	14-19
1544	14-3	1855	14-4	2528	14-2	3001	16-7	3711	14-18	4252	14-19
1545	14-3	1856	14-4	2531	14-2	3009	16-7	3712	14-18	4254	14-19
1546	14-3	1859	14-4	2532	14-2	3010	16-7	3713	14-18	4256	14-19
1548	14-3	1861	14-4	2533	14-2	3011	14-18	3716	14-18	4257	14-19
1549	14-3	1864	14-4	2534	14-2	3012	14-18	3717	14-18	4258	14-19
1552	14-3	1865	14-4	2535	14-2	3016	14-18	3718	14-18	4260	14-19
1554	14-3	1868	14-4	2536	14-2	3018	14-18	3719	14-18	4261	14-19
1556	14-3	1869	14-4	2606	14-3	3024	14-18	3720	14-18	4263	14-19
1557	14-3	1902	14-5	2612	14-3	3028	14-18	3721	14-18	4265	14-19
1558	14-3	1903	14-5	2613	14-3	3029	16-7	3724	14-18	4266	14-19
1560	14-3	1904	14-5	2620	14-3	3030	16-7	3725	14-18	4267	14-19
1561	14-3	1905	14-5	2621	14-3	3031	14-18	3726	14-18	4305	14-20
1563	14-3	1906	14-5	2623	14-3	3032	14-18	3728	14-18	4306	14-20
1565	14-3	1907	14-5	2624	14-3	3035	14-18	3731	14-18	4439	14-19
1566	14-3	1908	14-5	2625	14-3	3100	16-7	3732	14-18	4444	14-19
1567	14-3	1909	14-5	2627	14-3	3101	16-7	3733	14-18	4445	14-19
1602L3	1-3	1910	14-5	2629	14-3	3110	16-7	3735	14-18	4448	14-19
1712	14-4	1911	14-5	2631	14-3	3112	14-18	3806	14-18	4449	14-19
1713	14-4	1912	14-5	2634	14-3	3113	14-18	3812	14-18	4452	14-19
1717	14-4	1920	14-26	2636	14-3	3120	14-18	3813	14-18	4454	14-19
1718	14-4	1920MT	14-26	2639	14-3	3123	14-18	3820	14-18	4458	14-19
1722	14-4	1921	14-5	2640	14-3	3127	14-18	3821	14-18	4460	14-19
1723	14-4	1921MT	14-5	2644	14-3	3129	14-18	3823	14-18	4461	14-19
1727	14-4	1922	14-25	2645	14-3	3134	14-18	3824	14-18	4463	14-19
1729	14-4	1922MT	14-25	2646	14-3	3136	14-18	3825	14-18	4465	14-19
1731	14-4	1923	14-26	2648	14-3	3139	14-18	3827	14-18	4466	14-19
1733	14-4	1924	14-10	2649	14-3	3140	14-18	3829	14-18	4467	14-19
1734	14-4	1925	14-25	2652	14-3	3144	14-18	3831	14-18	4465	14-19
1735	14-4	1926	14-25	2654	14-3	3145	14-18	3834	14-18	4466	14-19
1736	14-4	2075B	3-5	2656	14-3	3146	14-18	3836	14-18	4467	14-19
1737	14-4	2120	14-12	2657	14-3	3202	14-20	3839	14-18	4468	14-19
1738	14-4	2123	14-12	2658	14-3	3203	14-20	3840	14-18	4469	14-19
1739	14-4	2127	14-12	2660	14-3	3502	14-18	3844	14-18	4670	14-19
1740	14-4	2129	14-12	2661	14-3	3504	14-18	3845	14-18	4671	14-19
1741	14-4	2134	14-12	2663	14-3	3505	14-18	3846	14-18	4672	14-19
1742	14-4, 14-5	2136	14-12	2665	14-3	3506	14-18	4020	14-19	4673	14-19
1743	14-4	2139	14-12	2666	14-3	3507	14-18	4023	14-19	4674	14-19
1744	14-4	2140	14-12	2667	14-3	3508	14-18	4027	14-19	4675	14-19
1749	14-4	2144	14-12	2700	14-7	3509	14-18	4029	14-19	5102	14-20
1750	14-4	2145	14-12	2701	14-7	3511	14-18	4034	14-19	5103	14-20
1752	14-4	2148	14-12	2712	14-4	3512	14-18	4036	14-19	5104	14-20
1754	14-4	2149	14-12	2717	14-4	3513	14-18	4039	14-19	5105	14-20
1755	14-4	2152	14-12	2718	14-4	3516	14-18	4040	14-19	5412	2-2
1756	14-4	2154	14-12	2722	14-4	3517	14-18	4044	14-19	5462	2-2
1759	14-4	2158	14-12	2723	14-4	3518	14-18	4045	14-19	5902L3	2-6
1761	14-4	2160	14-12	2727	14-4	3519	14-18	4048	14-19	5906	2-3
1764	14-4	2364	14-5	2729	14-4	3520	14-18	4049	14-19	5918	2-3
1765	14-4	2438	14-5	2731	14-4	3521	14-18	4052	14-19	6111	14-16
1768	14-4	2449	14-5	2733	14-4	3524	14-18	4054	14-19	6112	14-16
1769	14-4	2459	14-5	2734	14-4	3525	14-18	4056	14-19	6116	14-16
1812	14-4	2502	14-2	2737	14-4	3526	14-18	4057	14-19	6118	14-16
1817	14-4	2504	14-2	2738	14-4	3528	14-18	4058	14-19	6124	14-16
1818	14-4	2505	14-2	2739	14-4	3531	14-18	4060	14-19	6128	14-16
1822	14-4	2506	14-2	2740	14-4	3532	14-18	4102	14-20	6131	14-16
1823	14-4	2507	14-2	2742	14-4	3533	14-18	4103	14-20	6132	14-16
1827	14-4	2508	14-2	2743	14-4	3534	14-18	4104	14-20	6135	14-16
1829	14-4	2509	14-2	2744	14-4	3535	14-18	4105	14-20	6142L3	1-8
1831	14-4	2511	14-2	2749	14-4	3536	14-18	4220	14-19	6152L3	1-8
1833	14-4	2512	14-2	2750	14-4	3606	14-18	4223	14-19	6212	14-16

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
6213	14-16	6959	14-17	7649	14-19	8337	14-4	10201	9-17	10503	9-17
6220	14-16	6961	14-17	7652	14-19	8338	14-4	10202	9-17	10504	9-17
6312	14-17	7002	14-17	7654	14-19	8339	14-4	10203	9-17	10505	9-17
6313	14-17	7003	14-17	7658	14-19	8340	14-4	10204	9-17	10506	9-17
6317	14-17	7004	14-17	7660	14-19	8341	14-4	10205	9-17	10507	9-17
6318	14-17	7005	14-17	7720	14-22	8342	14-4	10206	9-17	10508	9-17
6322	14-17	7126HP-300	8-1	7723	14-22	8343	14-4	10207	9-17	10509	9-17
6323	14-17	7136HP-350	8-1	7727	14-22	8344	14-4	10208	9-17	10510	9-17
6327	14-17	7220	14-22	7729	14-22	8461	14-16	10209	9-17	10511	15-5
6411	14-16	7223	14-22	7734	14-22	8463	14-16	10210	9-17	10512	15-5
6412	14-16	7227	14-22	7736	14-22	8465	14-16	10211	9-17	10551	9-17
6416	14-16	7229	14-22	7739	14-22	8467	14-16	10220	15-2	10552	9-17
6418	14-16	7234	14-22	7740	14-22	8564	14-17	10221	15-2	10563	15-5
6424	14-16	7236	14-22	7744	14-22	8565	14-17	10225	15-3	10564	15-5
6428	14-16	7239	14-22	7745	14-22	8568	14-17	10226	15-3	10568	15-5
6431	14-16	7240	14-22	7748	14-22	8569	14-17	10227	15-3	10569	15-5
6432	14-16	7244	14-22	7749	14-22	9311	14-16	10231	15-1	10570	15-5
6435	14-16	7245	14-22	7752	14-22	9312	14-16	10232	15-1	10601	9-18
6512	14-16	7248	14-22	7754	14-22	9318	14-16	10233	15-1	10602	9-18
6520	14-16	7249	14-22	7756	14-22	9324	14-16	10234	15-1	10603	9-18
6523	14-16	7252	14-22	7757	14-22	9328	14-16	10235	15-1	10604	9-18
6527	14-16	7254	14-22	7758	14-22	9331	14-16	10239	15-1	10605	9-18
6529	14-16	7256	14-22	7760	14-22	9332	14-16	10301	9-18	10606	9-18
6534	14-16	7257	14-22	7761	14-22	9335	14-16	10302	9-18	10607	9-18
6536	14-16	7258	14-22	7763	14-22	9420	14-16	10303	9-18	10608	9-18
6539	14-16	7260	14-22	7765	14-22	9423	14-16	10304	9-18	11008	14-27
6540	14-16	7261	14-22	7766	14-22	9427	14-16	10305	9-18	11010	9-12
6544	14-16	7263	14-22	7767	14-22	9429	14-16	10306	9-18	11016	14-30
6545	14-16	7265	14-22	7855	14-23	9434	14-16	10307	9-18	11017	14-30
6612	14-17	7266	14-22	7858	14-23	9436	14-16	10308	9-18	11018	14-30
6613	14-17	7267	14-22	7859	14-23	9439	14-16	10309	9-18	11020	9-12
6617	14-17	7268	14-22	7865	14-23	9440	14-16	10310	15-2	11025	14-27
6618	14-17	7269	14-22	8011	14-2	9444	14-16	10311	15-2	11026	14-27
6622	14-17	7270	14-22	8012	14-2	9445	14-16	10312	15-2	11040	9-12
6623	14-17	7271	14-22	8018	14-2	9502	14-17	10313	15-2	11050	9-12
6627	14-17	7272	14-22	8024	14-2	9503	14-17	10314	15-2	11070	9-12
6629	14-17	7273	14-22	8028	14-2	9712	14-17	10329	15-5	11101	15-3
6631	14-17	7274	14-22	8031	14-2	9717	14-17	10331	15-5	11102	15-3
6633	14-17	7275	14-22	8032	14-2	9718	14-17	10332	15-5	11103	15-3
6634	14-17	7349	14-23	8035	14-2	9722	14-17	10335	15-5	11104	15-3
6635	14-17	7350	14-23	8120	14-3	9723	14-17	10337	15-5	11105	15-3
6636	14-17	7352	14-23	8123	14-3	9727	14-17	10338	15-5	11117	14-57
6637	14-17	7355	14-23	8127	14-3	9731	14-17	10340	15-5	11118	14-57
6638	14-17	7356	14-23	8129	14-3	9733	14-17	10341	15-5	11119	14-58
6639	14-17	7358	14-23	8134	14-3	9734	14-17	10342	15-5	11120	9-13
6640	14-17	7359	14-23	8136	14-3	9735	14-17	10344	15-5	11140	9-13
6641	14-17	7361	14-23	8139	14-3	9736	14-17	10346	15-5	11150	9-13
6642	14-17	7364	14-23	8140	14-3	9737	14-17	10347	15-5	11160	9-13
6643	14-17	7365	14-23	8144	14-3	9738	14-17	10353	15-5	11170	9-13
6644	14-17	7367	14-23	8145	14-3	9739	14-17	10359	15-5	11212	14-28
6702	14-17	7373	14-23	8148	14-3	9740	14-17	10362	15-5	11214	14-30
6703	14-17	7402	14-23	8149	14-3	9741	14-17	10365	15-5	11220	9-13
6711	14-17	7403	14-23	8152	14-3	9742	14-17	10368	15-5	11221	14-30
6712	14-17	7404	14-23	8154	14-3	9743	14-17	10371	15-5	11240	9-13
6844	14-16	7405	14-23	8158	14-3	9744	14-17	10401	9-15	11250	9-13
6845	14-16	7406	14-23	8160	14-3	10040	9-12	10402	9-15	11260	9-13
6848	14-16	7407	14-23	8202	14-5	10041	9-14	10403	9-15	11270	9-13
6849	14-16	7520	14-19	8203	14-5	10045	9-14	10404	9-15	11312	15-4
6852	14-16	7523	14-19	8312	14-4	10101	9-15	10405	9-15	11405	15-4
6854	14-16	7527	14-19	8317	14-4	10102	9-15	10406	9-15	11406	15-4
6858	14-16	7529	14-19	8318	14-4	10103	9-15	10407	9-16	11440	9-14
6860	14-16	7534	14-19	8322	14-4	10104	9-15	10408	9-16	11450	9-14
6901-65	3-33	7536	14-19	8323	14-4	10105	9-15	10409	9-16	11540	9-13
6949	14-17	7539	14-19	8327	14-4	10106	9-15	10432	15-5	11580	15-4
6950	14-17	7540	14-19	8331	14-4	10107	9-16	10491	15-4	11581	15-4
6952	14-17	7544	14-19	8333	14-4	10108	9-16	10492	15-4	11620	9-14
6954	14-17	7545	14-19	8334	14-4	10109	9-16	10493	15-4	11640	9-14
6955	14-17	7546	14-19	8335	14-4	10110	9-16	10494	15-4	11650	9-14
6956	14-17	7648	14-19	8336	14-4	10111	9-16	10502	15-3	11670	9-14



# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
11720	9-13	13125	7-5	15860	9-9	20111	13-19	23012	5-5	26319	14-41
11740	9-13	13907	9-14	15870	9-9	20112	13-19	23612	14-51	26319MT	14-41
11750	9-13	13908	9-14	16020	9-14	20113	13-19	23614	14-43	26376	14-32
11770	9-13	13909	9-14	16050	9-14	20114	13-19	23614MT	14-43	26376MT	14-32
11810	9-13	14000	9-2	16060	9-14	20115	13-19	23622	14-47	26377	14-31
11820	9-13	14010	9-2	16101	15-3	20116	13-19	23622MT	14-47	26377MT	14-31
11840	9-13	14011	9-2	16102	15-3	20117	13-19	24020	9-2	26394	14-38
11850	9-13	14015	9-2	16103	15-3	20118	13-19	24028	9-2	26394MT	14-38
11870	9-13	14020	9-2	16104	15-3	20119	13-19	24030	9-2	30104	13-18
11903	7-5	14023	9-2	16105	15-3	20120	13-19	240303C	9-2	30105	13-18
11905	7-5	14028	9-2	16120	9-14	20121	13-19	240306C	9-2	30106	13-18
11908	7-5	14030	9-2	16121	9-14	20122	13-19	24031	9-2	30107	13-18
11912	7-5	14031	9-2	17000	9-20	20123	13-19	24033	9-2	30108	13-18
11916	7-5	14032	9-2	17010	9-19	20124	13-19	24070	9-2	30109	13-18
12001	14-29	14050	9-2	17011	9-19	20125	13-19	24130	9-2	30110	13-18
12002	14-29	14051	9-2	17012	9-19	20126	13-19	24604	14-50	30111	13-18
12008	14-27	14053	9-2	17013	9-19	20127	13-19	24605	14-50	30112	13-18
12016	14-30	14055	9-2	17014	9-19	20128	13-19	24606	14-39	30113	13-18
12017	14-30	14060	9-2	17015	9-19	20129	13-19	24606MT	14-39	30114	13-18
12018	14-30	14070	9-2	17016	9-19	20130	13-19	24607	14-39	30115	13-18
12021	14-28	14074	9-2	17017	9-19	20131	13-19	24608	14-49	30116	13-18
12025	14-27	14076	9-2	17018	9-19	20132	13-19	24609	14-50	30117	13-18
12026	14-27	14080	9-2	17019	9-19	20133	13-19	24612	14-51	30118	13-18
12050	14-29	14082	9-2	17020	9-19	20134	13-19	24612MT	14-51	30119	13-18
12073	14-29	14084	9-2	17021	9-19	20135	13-19	24614	14-46	30120	13-18
12085	13-26	14130	9-2	17022	9-19	20136	13-19	24618	14-49	30121	13-18
12087	14-30	14170	9-2	17023	9-19	20137	13-19	24618MT	14-49	30122	13-18
12088	14-28	15008	9-8	17024	9-19	20138	13-19	24640	14-37	30123	13-18
12092	13-26	15010	9-8	17025	9-19	20139	13-19	24640MT	14-37	30124	13-18
12115	14-29	15020	9-8	17026	9-19	20140	13-19	24801	14-24	30125	13-18
12301	9-14	15030	9-8	17027	9-19	20141	13-19	24801MT	14-24	30126	13-18
12401	14-29	15050	9-8	17028	9-19	20142	13-19	24812	14-25	30127	13-18
12402	14-29	15060	9-8	17030	9-19	20143	13-19	24815	14-24	30128	13-18
12411	13-27	15070	9-8	17032	9-19	20144	13-19	24815MT	14-24	30129	13-18
12412	13-27	15080	9-8	17033	9-19	20145	13-19	24834	14-25	30130	13-18
12413	13-27	15090	9-8	17034	9-19	20146	13-19	24834MT	14-25	30131	13-18
12415	14-29	15101	15-2	17036	9-19	20147	13-19	24839	14-23	30132	13-18
12416	14-27	15102	15-2	17037	9-19	20148	13-19	24839MT	14-23	30204	13-25
12421	14-28	15103	15-2	17038	9-19	20149	13-19	25030	9-8	30205	13-25
12428	14-27	15104	15-2	17040	9-19	20150	13-19	25120	9-8	30206	13-25
12435	14-27	15120	9-8	17041	9-19	20151	13-19	25130	9-8	30207	13-25
12436	14-27	15130	9-8	17042	9-19	20152	13-20	25136	9-9	30208	13-25
12445	14-27	15150	9-8	17044	9-19	20153	13-20	25150	9-8	30209	13-25
12446	14-27	15160	9-8	17046	9-19	20154	13-20	25230	9-8	30210	13-25
12450	14-29	15170	9-8	17048	9-19	20155	13-20	25270	9-8	30211	13-25
12457	14-27	15210	9-8	17050	9-19	20156	13-20	25531	9-8	30212	13-25
12473	14-29	15220	9-8	17052	9-19	20157	13-20	25701	14-24	30213	13-25
12498	14-28	15230	9-8	17054	9-19	20158	13-20	25701MT	14-24	30214	13-25
12501	9-21	15250	9-8	17056	9-19	20159	13-20	25712	14-25	30215	13-25
12502	9-21	15260	9-8	17058	9-19	20160	13-20	25734	14-24	30216	13-25
12503	9-21	15270	9-8	17060	9-19	21001	5-1	25734MT	14-24	30217	13-25
12504	9-21	15280	9-8	17062	9-19	21002	5-1	25914	14-44	30218	13-25
12505	9-21	15350	9-8	17064	9-19	21003	5-2	25914MT	14-44	30219	13-25
12506	9-21	15360	9-8	17100	9-20	21004	5-3	25915	14-51	30220	13-25
12635	9-21	15370	9-8	17101	9-20	21005	5-2	25915MT	14-51	30221	13-25
12642	9-21	15420	9-9	17102	9-20	2100B	3-4	25922	14-48	30222	13-25
12662	9-21	15440	9-9	20001	5-4	21040	9-12	25922MT	14-48	30223	13-25
12735	9-21	15450	9-9	20002	5-4	21101	14-29	25923	14-48	30224	13-25
12742	9-21	15470	9-9	20040	9-12	21102	14-29	25923MT	14-48	30225	13-25
12762	9-21	15502	15-3	20101	13-19	21201	14-29	25926	14-49	30226	13-25
12835	9-21	15530	9-9	20102	13-19	21202	14-29	25926MT	14-49	30227	13-25
12842	9-21	15531	9-8	20103	13-19	21304	5-3	25941	14-42	30228	13-25
12862	9-21	15550	9-9	20104	13-19	21840	9-13	25941MT	14-42	30229	13-25
12935	9-21	15560	9-9	20105	13-19	22007	5-5	25974	14-6	30230	13-25
12942	9-21	15570	9-9	20106	13-19	22010	5-5	25974MT	14-6	30231	13-25
12962	9-21	15701	9-11	20107	13-19	22012	5-5	25978	14-6	30232	13-25
13030	7-5	15702	9-10	20108	13-19	22140	9-13	26313	14-47	30505	13-25
13055	7-5	15830	9-9	20109	13-19	23007	5-5	26317	14-40	30507	13-25
13085	7-5	15850	9-9	20110	13-19	23010	5-5	26317MT	14-40	30510	13-25

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
30516	.....13-25	39804	.....11-19	41809	.....11-11	43616	.....11-9	46615	.....11-8	47410	.....11-5
30519	.....13-25	39805	.....11-19	41811	.....11-11	43618	.....11-9	46616	.....11-8	47411	.....11-5
30520	.....13-25	39806	.....11-19	41813	.....11-11	43620	.....11-9	46617	.....11-8	47412	.....11-5
34403	.....14-14	39808	.....11-19	41815	.....11-11	43624	.....11-9	46711	.....11-8	47413	.....11-5
34403MT	.....14-14	39904	.....11-19	41817	.....11-11	43695	.....11-9	46713	.....11-8	47414	.....11-5
38413	.....14-14	39905	.....11-19	42410	.....11-5	43697	.....11-9	46716	.....11-8	47415	.....11-5
38413MT	.....14-14	39906	.....11-19	42411	.....11-5	43699	.....11-9	46809	.....11-6	47416	.....11-5
38503	.....11-17	40004	.....11-19	42412	.....11-5	43805	.....11-6	46810	.....11-6	47417	.....11-5
38504	.....11-17	40005	.....11-19	42413	.....11-5	43904	.....11-16	46811	.....11-6	47418	.....11-5
38505	.....11-17	40006	.....11-19	42414	.....11-5	43906	.....11-16	46812	.....11-6	47420	.....11-5
38506	.....11-17	40008	.....11-19	42416	.....11-5	43907	.....11-6	46813	.....11-6	47422	.....11-5
38508	.....11-17	40010	.....11-19	42418	.....11-5	43908	.....11-16	46909	.....11-6	47424	.....11-5
38603	.....11-17	40012	.....11-19	42420	.....11-5	43910	.....11-16	46910	.....11-6	47704	.....11-10
38604	.....11-17	40101	.....13-16	42804	.....13-26	44001	.....11-13	46911	.....11-6	47705	.....11-10
38605	.....11-17	40102	.....13-16	42806	.....13-26	44202	.....11-13	46912	.....11-6	47706	.....11-10
38606	.....11-17	40103	.....13-16	42808	.....13-26	44421	.....11-13	46913	.....11-6	47707	.....11-10
38607	.....11-17	40104	.....2-5	42810	.....13-26	44622	.....11-13	46914	.....11-6	47708	.....11-10
38608	.....11-17	40104D	.....13-16	42812	.....13-26	44801	.....11-13	46915	.....11-6	47709	.....11-10
38610	.....11-17	40105	.....2-5	42814	.....13-26	45002	.....11-13	47009	.....11-6	47710	.....11-10
38611	.....11-17	40105D	.....13-16	42816	.....13-26	45304	.....11-7	47010	.....11-6	47711	.....11-10
38612	.....11-17	40106	.....13-16	42839	.....13-26	45305	.....11-7	47011	.....11-6	47712	.....11-10
38703	.....11-17	40107	.....13-16	42840	.....13-26	45306	.....11-7	47012	.....11-6	47713	.....11-10
38704	.....11-17	40108	.....13-16	42852	.....13-27	45307	.....11-7	47013	.....11-6	47714	.....11-10
38705	.....11-17	40109	.....13-16	42855	.....13-27	45308	.....11-7	47014	.....11-6	47715	.....11-10
38706	.....11-17	40110	.....2-5	42858	.....13-27	45309	.....11-7	47015	.....11-6	47716	.....11-10
38708	.....11-17	40110D	.....13-16	42861	.....13-27	45310	.....11-7	47016	.....11-6	47717	.....11-10
38804	.....11-17	40111	.....2-5	42904	.....11-15	45311	.....11-7	47017	.....11-6	47718	.....11-10
38806	.....11-17	40111D	.....13-16	42906	.....11-15	45312	.....11-7	47104	.....11-8	47720	.....11-10
38904	.....11-18	40112	.....13-16	42908	.....11-15	45313	.....11-7	47105	.....11-8	47722	.....11-10
38905	.....11-18	40113	.....13-16	42910	.....11-15	45314	.....11-7	47106	.....11-8	47724	.....11-10
38906	.....11-18	40114	.....13-16	42912	.....11-15	45316	.....11-7	47107	.....11-8	47809	.....11-12
38907	.....11-18	40115	.....13-16	42914	.....11-15	45406	.....11-7	47108	.....11-8	47810	.....11-12
38908	.....11-18	40116	.....13-16	42916	.....11-15	45407	.....11-7	47109	.....11-8	47811	.....11-12
38909	.....11-18	40117	.....13-16	42918	.....11-15	45409	.....11-7	47110	.....11-8	47909	.....11-11
38910	.....11-18	40118	.....13-16	42920	.....11-15	45411	.....11-7	47111	.....11-8	47911	.....11-11
38911	.....11-18	40119	.....13-16	42922	.....11-15	45412	.....11-7	47112	.....11-8	47913	.....11-11
38912	.....11-18	40120	.....13-16	42924	.....11-15	45513	.....11-7	47113	.....11-8	47915	.....11-11
39004	.....11-18	40121	.....13-16	42926	.....11-15	45516	.....11-7	47114	.....11-8	47917	.....11-11
39005	.....11-18	40122	.....13-16	42928	.....11-15	45606	.....11-7	47115	.....11-8	48013	.....11-12
39006	.....11-18	40123	.....13-16	42930	.....11-15	45608	.....11-7	47116	.....11-8	48109	.....11-11
39007	.....11-18	40124	.....13-16	42932	.....11-15	45610	.....11-7	47117	.....11-8	48111	.....11-11
39008	.....11-18	40125	.....13-16	42934	.....11-15	45611	.....11-7	47118	.....11-8	48113	.....11-11
39009	.....11-18	40126	.....13-16	42936	.....11-15	45612	.....11-7	47120	.....11-8	48211	.....11-11
39010	.....11-18	40127	.....13-16	42940	.....11-15	45613	.....11-7	47124	.....11-8	48213	.....11-11
39011	.....11-18	40127MT	.....13-16	43016	.....11-14	45614	.....11-7	47306	.....11-5	48215	.....11-11
39012	.....11-18	40150	.....2-5	43018	.....11-14	45616	.....11-7	47307	.....11-5	48311	.....11-11
39104	.....11-18	40150QC	.....2-5	43020	.....11-14	45811	.....11-10	47308	.....11-5	48313	.....11-11
39105	.....11-18	40151	.....1-9	43022	.....11-14	46204	.....11-10	47309	.....11-5	48315	.....11-11
39106	.....11-18	40152	.....1-9	43024	.....11-14	46206	.....11-10	47310	.....11-5	48317	.....11-11
39107	.....11-18	40153	.....1-9	43028	.....11-14	46208	.....11-10	47311	.....11-5	48413	.....14-14
39108	.....11-18	40155	.....2-5	43032	.....11-14	46210	.....11-10	47312	.....11-5	48508	.....11-11
39109	.....11-18	40155QC	.....2-5	43034	.....11-14	46211	.....11-10	47313	.....11-5	48509	.....11-11
39110	.....11-18	40160	.....2-5	43036	.....11-14	46212	.....11-10	47314	.....11-5	48511	.....11-11
39111	.....11-18	40165	.....2-5	43041	.....11-14	46213	.....11-10	47315	.....11-5	48513	.....11-11
39112	.....11-18	40200	.....2-5	43047	.....11-14	46214	.....11-10	47316	.....11-5	48609	.....11-11
39404	.....11-18	41106	.....13-16	43058	.....11-14	46215	.....11-10	47317	.....11-5	48709	.....11-11
39405	.....11-18	41109	.....13-16	43074	.....11-14	46216	.....11-10	47318	.....11-5	48711	.....11-11
39406	.....11-18	41110	.....13-16	43604	.....11-9	46509	.....11-8	47319	.....11-5	48713	.....11-11
39408	.....11-18	41114	.....13-16	43605	.....11-9	46511	.....11-8	47320	.....11-5	48715	.....11-11
39504	.....11-18	41115	.....13-16	43606	.....11-9	46513	.....11-8	47321	.....11-5	48717	.....11-11
39505	.....11-18	41116	.....13-16	43607	.....11-9	46606	.....11-8	47322	.....11-5	48809	.....11-12
39506	.....11-18	41117	.....13-16	43608	.....11-9	46607	.....11-8	47324	.....11-5	48813	.....11-12
39508	.....11-18	41118	.....13-16	43609	.....11-9	46608	.....11-8	47326	.....11-5	48911	.....11-12
39604	.....11-18	41120	.....13-16	43610	.....11-9	46609	.....11-8	47328	.....11-5	48913	.....11-12
39605	.....11-18	41121	.....13-16	43611	.....11-9	46610	.....11-8	47332	.....11-5	49307	.....11-10
39606	.....11-18	41126	.....13-16	43612	.....11-9	46611	.....11-8	47406	.....11-5	49506	.....11-7
39608	.....11-18	41209	.....11-11	43613	.....11-9	46612	.....11-8	47407	.....11-5	49507	.....11-7
39704	.....11-19	41211	.....11-11	43614	.....11-9	46613	.....11-8	47408	.....11-5	49508	.....11-7
39706	.....11-19	41213	.....11-11	43615	.....11-9	46614	.....11-8	47409	.....11-5	49600	.....11-16

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
49608	11-7	50532	16-3	52490	14-55	53604	14-55	53848	16-5	57086	16-6
49612	11-16	50535	16-7	52601	14-55	53605	14-55	53864	16-5	57092	16-6
49613	11-16	50539	16-7	52602	14-55	53606	14-55	54122	2-2	57095	16-6
49614	11-16	51316	16-2	52603	14-55	53607	14-55	54212	9-20	57096	16-6
49615	11-16	51320	16-2	52604	14-55	53625	14-56	54444	16-6	58100	2-4
49616	11-16	51324	16-2	52605	14-55	53635	14-56	54445	16-6	58146	2-5
49617	11-16	51328	16-2	52606	14-55	53645	14-56	54446	16-6	58200	2-4
49618	11-16	51332	16-2	52607	14-55	53700	14-57	54606	2-5	58246	2-5
49707	11-7	51336	16-2	52625	14-56	53701	14-57	54636	2-5	58300	2-4
49708	11-7	51340	16-2	52635	14-56	53702	14-57	55801	9-6	59000	2-5
49709	11-7	51348	16-2	52655	14-56	53703	14-57	55802	9-6	59001	2-5
49808	11-7	51356	16-2	53006	2-3	53704	14-57	55803	9-6	59120	2-5
49904	11-4	51364	16-2	53006U	2-3	53705	14-57	55804	9-6	59150	2-5
49905	11-4	51816	16-2	53016	2-3	53706	14-57	55805	9-6	59220	2-5
49906	11-4	51820	16-2	53026	2-3	53709	9-19	55806	9-6	59250	2-5
49907	11-4	51824	16-2	53046	2-3	53710	9-19	55807	9-6	59300	2-5
49908	11-4	51828	16-2	53201	14-56	53711	9-19	55809	9-6	59301	2-5
49909	11-4	51832	16-2	53202	14-56	53712	9-19	55810	9-6	59320	2-5
49910	11-4	51836	16-2	53203	14-56	53713	9-19	55811	9-6	59350	2-5
49911	11-4	51840	16-2	53204	14-56	53714	9-19	55812	9-6	60101	13-4
49912	11-4	51848	16-2	53205	14-56	53715	9-19	55813	9-6	60102	13-4
49913	11-4	51856	16-2	53206	14-56	53716	9-19	55814	9-6	60103	13-4
49914	11-4	51864	16-2	53207	14-56	53717	9-19	55815	9-6	60104	13-4
49915	11-4	52201	14-56	53208	14-56	53718	9-19	55818	9-6	60105	13-4
49916	11-4	52202	14-56	53209	14-56	53719	9-19	55819	9-6	60106	13-4
49918	11-4	52203	14-56	53210	14-56	53720	9-19	55820	9-6	60107	13-4
49920	11-4	52204	14-56	53211	14-56	53721	9-19	55821	9-6	60108	13-4
49922	11-4	52205	14-56	53212	14-56	53722	9-19	55822	9-6	60109	13-4
49924	11-4	52206	14-56	53213	14-56	53723	9-19	55823	9-6	60110	13-4
49998	11-4	52207	14-56	53214	14-56	53724	9-19	55824	9-6	60111	13-4
49999	11-4	52208	14-56	53215	14-56	53725	9-19	55825	9-6	60112	13-4
50108	16-1	52209	14-56	53216	14-56	53726	9-19	55826	9-14	60113	13-4
50110	16-1	52210	14-56	53217	14-56	53727	9-19	55827	9-6	60114	13-4
50112	16-1	52211	14-56	53218	14-56	53728	9-19	55828	9-6	60115	13-4
50116	16-1	52212	14-56	53219	14-56	53730	9-19	55830	9-6	60116	13-4
50120	16-1	52213	14-56	53220	14-56	53732	9-19	55846	9-6	60117	13-4
50124	16-1	52214	14-56	53221	14-56	53733	9-19	55911	9-6	60118	13-4
50128	16-1	52215	14-56	53222	14-56	53734	9-19	56230	9-4	60119	13-4
50132	16-1	52216	14-56	53223	14-56	53736	9-19	56240	9-4	60120	13-4
50133	16-1	52217	14-56	53224	14-56	53737	9-19	56250	9-4	60121	13-4
50136	16-1	52218	14-56	53225	14-56	53738	9-19	56330	9-4	60122	13-4
50140	16-1	52219	14-56	53226	14-56	53740	9-19	56340	9-4	60123	13-4
50148	16-1	52220	14-56	53226MT	14-56	53741	9-19	56350	9-4	60124	13-4
50156	16-1	52221	14-56	53227	14-56	53742	9-19	56360	9-4	60125	13-4
50164	16-1	52222	14-56	53227MT	14-56	53744	9-19	56370	9-4	60126	13-4
50165	16-1	52223	14-56	53228	14-56	53746	9-19	56380	9-4	60127	13-4
50172	16-1	52224	14-56	53228MT	14-56	53748	9-19	56450	9-4	60128	13-4
50180	16-1	52225	14-56	53401	14-55	53750	9-19	56470	9-4	60129	13-4
50188	16-1	52316	16-2	53402	14-55	53752	9-19	56530	9-4	60130	13-4
50196	16-1	52320	16-2	53403	14-55	53754	9-19	56540	9-4	60131	13-4
50308	16-4	52324	16-2	53404	14-55	53756	9-19	56550	9-4	60132	13-4
50310	16-4	52328	16-2	53405	14-55	53758	9-19	56560	9-4	60133	13-6
50312	16-4	52332	16-2	53406	14-55	53760	9-19	56630	9-4	60133MT	13-6
50314	16-4	52340	16-2	53407	14-55	53762	9-19	56640	9-4	60134	13-6
50316	16-4	52348	16-2	53425	14-55	53764	9-19	56650	9-4	60134MT	13-6
50318	16-4	52364	16-2	53508	16-5	53766	9-19	56660	9-4	60134P	13-6
50320	16-4	52401	14-55	53510	16-5	53768	9-19	56730	9-4	60135	13-6
50324	16-4	52402	14-55	53512	16-5	53770	9-19	56740	9-4	60136	13-6
50326	16-4	52403	14-55	53516	16-5	53772	9-19	56750	9-4	60136MT	13-6
50332	16-4	52404	14-55	53520	16-5	53776	9-19	56830	9-4	60137	13-6
50334	16-4	52405	14-55	53524	16-5	53780	9-19	56840	9-4	60137MT	13-6
50336	16-4	52406	14-55	53532	16-5	53788	9-19	56850	9-4	60138	13-6
50340	16-4	52407	14-55	53535	14-55	53792	9-19	56860	9-4	60138MT	13-6
50350	16-4	52408	14-55	53540	16-5	53796	9-19	57080	16-6	60139	13-6
50508	16-3	52409	14-55	53545	14-55	53816	16-5	57081	16-6	60140	13-6
50512	16-3	52410	14-55	53548	16-5	53820	16-5	57082	16-6	60141	13-7
50516	16-3	52425	14-55	53601	14-55	53824	16-5	57083	16-6	60142	13-7
50520	16-3	52435	14-55	53602	14-55	53832	16-5	57084	16-6	60143	13-6
50524	16-3	52445	14-55	53603	14-55	53840	16-5	57085	16-6	60144	13-6

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
60144MT	13-6	60707	13-2	61210	13-22	63116	13-12	63511	13-8	63907	13-13
60144P	13-6	60708	13-2	61212	13-22	63117	13-12	63512	13-8	63908	13-13
60145	13-6	60709	13-2	61214	13-22	63118	13-12	63513	13-8	63909	13-13
60146	13-6	60710	13-2	61216	13-22	63119	13-12	63514	13-8	63910	13-13
60147	13-7	60711	13-2	61218	13-22	63120	13-12	63515	13-8	63911	13-13
60148	13-7	60712	13-2	61220	13-22	63121	13-12	63516	13-8	63912	13-13
60149	13-7	60713	13-2	61222	13-22	63122	13-12	63517	13-8	63913	13-13
60149P	13-7	60714	13-2	61224	13-22	63123	13-12	63518	13-8	63914	13-13
60150	13-6	60715	13-2	61226	13-22	63124	13-12	63519	13-8	63915	13-13
60151	14-58	60716	13-2	61228	13-22	63125	13-12	63520	13-8	63916	13-13
60152	13-7	60717	13-2	61230	13-22	63126	13-12	63521	13-8	63918	13-13
60155	13-6	60718	13-2	61232	13-22	63127	13-12	63522	13-8	63920	13-13
60156	13-6	60719	13-2	61408	13-23	63128	13-12	63523	13-8	63922	13-13
60160	13-7	60720	13-2	61410	13-23	63129	13-12	63524	13-8	63924	13-13
60160MT	13-7	60721	13-2	61412	13-23	63130	13-12	63525	13-8	63926	13-13
60161	13-5	60722	13-2	61416	13-23	63131	13-12	63526	13-8	63928	13-13
60161MT	13-5	60723	13-2	61611	13-24	63132	13-12	63527	13-8	63930	13-13
60172	13-26	60724	13-2	61620	13-24	63134	13-12	63528	13-8	63932	13-13
60175	13-5	60725	13-2	61630	13-24	63136	13-12	63529	13-8	63950	7-1
60221	13-6	60726	13-2	62104	13-22	63137	13-12	63530	13-8	64050	7-1
60221MT	13-6	60727	13-2	62108	13-22	63138	13-12	63531	13-8	64100	7-4
60260	13-18	60728	13-2	62112	13-22	63140	13-12	63532	13-8	64101	7-4
60325	13-2	60729	13-2	62116	13-22	63155	13-12	63536	13-9	64102	7-4
60326	13-2	60730	13-2	62120	13-22	63221	13-12	63537	13-9	64110	7-1
60327	13-2	60731	13-2	62124	13-22	63304	13-12	63538	13-9	64111	7-1
60328	13-2	60732	13-2	62128	13-22	63305	13-12	63548	13-9	64125	7-1
60329	13-2	60736	13-3	62132	13-22	63306	13-12	63621	13-9	64126	7-1
60330	13-2	60737	13-3	62304	13-24	63307	13-12	63704	13-13	64310	7-1
60331	13-2	60738	13-3	62305	13-24	63308	13-12	63705	13-13	64311	7-1
60332	13-2	60738MT	13-3	62306	13-24	63309	13-12	63706	13-13	64490	7-3
60504	13-4	60748	13-3	62307	13-24	63310	13-12	63707	13-13	64491	7-3
60505	13-4	60840	13-6	62308	13-24	63311	13-12	63708	13-13	64492	7-3
60506	13-4	60904	13-2	62309	13-24	63312	13-12	63709	13-13	64494	7-3
60507	13-4	60905	13-2	62310	13-24	63313	13-12	63710	13-13	64495	7-3
60508	13-4	60906	13-2	62311	13-24	63314	13-12	63711	13-13	64496	7-3
60509	13-4	60907	13-2	62312	13-24	63315	13-12	63712	13-13	64497	7-3
60510	13-4	60908	13-2	62313	13-24	63316	13-12	63713	13-13	64498	7-3
60511	13-4	60909	13-2	62314	13-24	63317	13-12	63714	13-13	64499	7-3
60512	13-4	60910	13-2	62315	13-24	63318	13-12	63715	13-13	64525	7-3
60513	13-4	60911	13-2	62316	13-24	63319	13-12	63716	13-13	64550	7-3
60514	13-4	60912	13-2	62317	13-24	63320	13-12	63717	13-13	64601	7-5
60515	13-4	60913	13-2	62318	13-24	63321	13-12	63718	13-13	64610	7-3
60516	13-4	60914	13-2	62319	13-24	63322	13-12	63719	13-13	64801	7-2
60517	13-4	60915	13-2	62320	13-24	63323	13-12	63720	13-13	64802	7-2
60518	13-4	60916	13-2	62321	13-24	63324	13-12	63721	13-13	64803	7-2
60519	13-4	60917	13-2	62322	13-24	63325	13-12	63722	13-13	64804	7-2
60520	13-4	60918	13-2	62323	13-24	63326	13-12	63723	13-13	64805	7-2
60521	13-4	60919	13-2	62324	13-24	63327	13-12	63724	13-13	64806	7-2
60522	13-4	60920	13-2	62325	13-24	63328	13-12	63725	13-13	64900	7-2
60523	13-4	60921	13-2	62326	13-24	63329	13-12	63726	13-13	64901	7-2
60524	13-4	60922	13-2	62327	13-24	63330	13-12	63727	13-13	64901SLPE	7-2
60525	13-4	60923	13-2	62328	13-24	63331	13-12	63728	13-13	64902	7-2
60526	13-4	60924	13-2	62329	13-24	63332	13-12	63729	13-13	64902SLPE	7-2
60527	13-4	60934	13-3	62330	13-24	63425	13-8	63730	13-13	64903	7-2
60528	13-4	60940	13-3	62331	13-24	63426	13-8	63731	13-13	64904	7-2
60529	13-4	60955	13-3	62332	13-24	63427	13-8	63732	13-13	64905	7-2
60530	13-4	61108	16-3	63103	13-12	63428	13-8	63734	13-13	64906	7-2
60531	13-4	61112	16-3	63104	13-12	63429	13-8	63736	13-13	64907	7-2
60532	13-4	61116	16-3	63105	13-12	63430	13-8	63737	13-13	64908	7-2
60607	13-23	61120	16-3	63106	13-12	63431	13-8	63738	13-13	65101	7-2
60608	13-23	61124	16-3	63107	13-12	63432	13-8	63740	13-13	65101SLPE	7-2
60609	13-23	61128	16-3	63108	13-12	63503	13-8	63755	13-13	65102	7-2
60610	13-23	61132	16-3	63109	13-12	63504	13-8	63826	13-2	65102SLPE	7-2
60612	13-23	61140	16-3	63110	13-12	63505	13-8	63828	13-2	65103	7-2
60614	13-23	61148	16-3	63111	13-12	63506	13-8	63830	13-2	65104	7-2
60616	13-23	61170	16-3	63112	13-12	63507	13-8	63832	13-2	65105	7-2
60704	13-2	61204	13-22	63113	13-12	63508	13-8	63904	13-13	65106	7-2
60705	13-2	61206	13-22	63114	13-12	63509	13-8	63905	13-13	65201	7-2
60706	13-2	61208	13-22	63115	13-12	63510	13-8	63906	13-13	65202	7-2

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
65205	7-2	66614	13-22	70434	18-3	70715	18-2	73318	13-10	80132	13-14
65301	7-2	66615	13-22	70436	18-3	70718	18-2	73319	13-10	80133	13-14
65302	7-2	66616	13-22	70439	18-3	70723	18-2	73320	13-10	80134	13-14
65303	7-2	66617	13-22	70442	18-3	70724	18-2	73321	13-10	80135	13-14
65304	7-2	66618	13-22	70445	18-3	71108	13-23	73322	13-10	80136	13-14
65597	18-4	66619	13-22	70448	18-3	71120	13-23	73323	13-10	80137	13-14
65601	7-3	66620	13-22	70451	18-3	71124	13-23	73324	13-10	80138	13-14
65602	7-3	66621	13-22	70470	18-5	71128	13-23	73325	13-10	80139	13-14
65603	7-3	66622	13-22	70471	18-5	71132	13-23	73326	13-10	80140	13-14
65604	7-3	66623	13-22	70472	18-5	71420	13-5	73327	13-10	80141	13-14
65610	7-3	66624	13-22	70473	18-5	71424	13-5	73328	13-10	80142	13-14
65629	9-2	66625	13-22	70473B	18-5	71428	13-5	73329	13-10	80143	13-14
65630	9-2	66626	13-22	70474	18-5	71432	13-5	73330	13-10	80144	13-14
65643	9-2	66627	13-22	70474B	18-5	71825	13-5	73331	13-10	80145	13-14
65644	9-2	66628	13-22	70475	18-5	71826	13-5	73332	13-10	80146	13-14
65648	9-9	66630	13-22	70476	18-5	71827	13-5	73334	13-11	80147	13-14
65649	9-2	66632	13-22	70476B	18-5	71828	13-5	73340	13-11	80148	13-14
65654	9-9	66704	13-22	70477	18-5	71829	13-5	73355	13-11	80149	13-14
65655	9-9	66708	13-22	70478	18-5	71830	13-5	73425	13-11	80150	13-14
65667	9-2	66712	13-22	70479	18-5	71831	13-5	73426	13-11	80151	13-14
65901	7-3	66716	13-22	70479B	18-5	71832	13-5	73427	13-11	80152	13-14
65902	7-3	66720	13-22	70480	18-5	73104	13-10	73428	13-11	80153	13-15
65903	7-3	66724	13-22	70480B	18-5	73105	13-10	73429	13-11	80154	13-15
65904	7-3	66728	13-22	70481B	18-5	73106	13-10	73430	13-11	80155	13-15
65905	7-3	66732	13-22	70490	18-5	73107	13-10	73431	13-11	80156	13-15
65910	7-3	68013	13-18	70501	18-4	73108	13-10	73432	13-11	80157	13-15
66100	7-5	68025	13-17	70504	18-4	73109	13-10	73625	13-11	80158	13-15
66200	7-4	68025MT	13-17	70507	18-4	73110	13-10	73626	13-11	80159	13-15
66201	7-4	68100	13-17	70510	18-4	73111	13-10	73627	13-11	80160	13-15
66202	7-4	68150	13-17	70513	18-4	73112	13-10	73628	13-11	80161	13-15
66211	7-4	68200	13-17	70516	18-4	73113	13-10	73629	13-11	80162	13-15
66220	7-4	68250	13-17	70519	18-4	73114	13-10	73630	13-11	80163	13-15
66222	7-4	68300	13-17	70522	18-4	73115	13-10	73631	13-11	80164	13-15
66230	7-4	68350	13-17	70525	18-4	73116	13-10	73632	13-11	80165	13-15
66231	7-4	68400	13-17	70528	18-4	73117	13-10	73826	13-5	80166	13-15
66300	7-5	68450	13-17	70531	18-4	73118	13-10	73828	13-5	80167	13-15
66301	7-5	68500	13-17	70534	18-4	73119	13-10	73830	13-5	80168	13-15
66302	7-5	68550	13-17	70551	18-3	73120	13-10	73832	13-5	80169	13-15
66305SL	7-5	68600	13-17	70552	18-3	73121	13-10	80101	13-14	80170	13-15
66399	7-5	68650	13-17	70555	18-3	73122	13-10	80102	13-14	80171	13-15
66400	7-5	68700	13-17	70556	18-3	73123	13-10	80103	13-14	80172	13-15
66401	7-4	68750	13-17	70559	18-3	73124	13-10	80104	13-14	80173	13-15
66402	7-4	68800	13-17	70562	18-3	73125	13-10	80105	13-14	80174	13-15
66403	7-4	68850	13-17	70563	18-3	73126	13-10	80106	13-14	80175	13-15
66404	7-4	68900	13-17	70566	18-3	73127	13-10	80107	13-14	80176	13-15
66405	7-4	68950	13-17	70567	18-3	73128	13-10	80108	13-14	80177	13-15
66406	7-4	69010	13-17	70569	18-3	73129	13-10	80109	13-14	80178	13-15
66450	7-4	69015	13-17	70570	18-3	73130	13-10	80110	13-14	80179	13-15
66451	7-4	69110	13-17	70572	18-3	73131	13-10	80111	13-14	80180	13-15
66452	7-4	69115	13-17	70606	18-1	73132	13-10	80112	13-14	80181	13-15
66500	7-4	69120	13-17	70607	18-1	73136	13-11	80113	13-14	80181MT	13-15
66501	7-4	69125	13-17	70608	18-1	73137	13-11	80114	13-14	80182	13-15
66502	7-4	69130	13-17	70609	18-1	73138	13-11	80115	13-14	80182MT	13-15
66503	7-4	70110	13-6	70610	18-1	73148	13-11	80116	13-14	80183	13-15
66504	7-4	70218	13-5	70611	18-2	73149	13-11	80117	13-14	80183MT	13-15
66505	7-4	70220	13-5	70612	18-2	73304	13-10	80118	13-14	80185	14-6
66506	7-4	70222	13-5	70613	18-2	73305	13-10	80119	13-14	80187	14-6
66510	7-4	70224	13-5	70616	18-2	73306	13-10	80120	13-14	80189	13-26
66603	13-22	70226	13-5	70617	18-2	73307	13-10	80121	13-14	80209	14-7
66604	13-22	70228	13-5	70619	18-2	73308	13-10	80122	13-14	80213	14-7
66605	13-22	70230	13-5	70620	18-2	73309	13-10	80123	13-14	80217	14-7
66606	13-22	70232	13-5	70621	18-2	73310	13-10	80124	13-14	80220	14-7
66607	13-22	70401	18-3	70622	18-2	73311	13-10	80125	13-14	80221	14-7
66608	13-22	70402	18-3	70701	18-1	73312	13-10	80126	13-14	80222	14-7
66609	13-22	70403	18-3	70702	18-1	73313	13-10	80127	13-14	80230	14-7
66610	13-22	70404	18-3	70703	18-1	73314	13-10	80128	13-14	80232	14-7
66611	13-22	70405	18-3	70704	18-1	73315	13-10	80129	13-14	80235	14-7
66612	13-22	70406	18-3	70705	18-1	73316	13-10	80130	13-14	80238	14-7
66613	13-22	70431	18-3	70714	18-2	73317	13-10	80131	13-14	80242	14-7



# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
80260	.....14-7	81439	.....6-10	85357	.....6-11	86607	.....6-7	86850	.....6-7	88811	.....11-2
81101	.....13-14	82334	.....6-10	85358	.....6-11	86608	.....6-7	86851	.....6-7	88812	.....11-2
81102	.....13-14	82336	.....6-10	85359	.....6-11	86609	.....6-7	86852	.....6-7	88813	.....11-2
81103	.....13-14	82337	.....6-10	85361	.....6-11	86610	.....6-7	86853	.....6-7	88814	.....11-2
81104	.....13-14	82338	.....6-10	85363	.....6-11	86611	.....6-7	86854	.....6-7	88815	.....11-2
81105	.....13-14	82430	.....6-10	85406	.....6-11	86612	.....6-7	86855	.....6-7	88816	.....11-2
81106	.....13-14	82432	.....6-10	85407	.....6-11	86613	.....6-7	86856	.....6-7	88818	.....11-2
81107	.....13-14	82433	.....6-10	85408	.....6-11	86614	.....6-7	86857	.....6-7	88820	.....11-2
81108	.....13-14	82434	.....6-10	85409	.....6-11	86615	.....6-7	86858	.....6-7	88822	.....11-2
81109	.....13-14	84306	.....6-12	85410	.....6-11	86700	.....6-6	86859	.....6-7	88824	.....11-2
81110	.....13-14	84307	.....6-12	85411	.....6-11	86703	.....6-7	86860	.....6-7	88887	.....11-3
81111	.....13-14	84308	.....6-12	85412	.....6-11	86704	.....6-7	86861	.....6-7	88888	.....11-3
81112	.....13-14	84309	.....6-12	85413	.....6-11	86705	.....6-7	86862	.....6-7	88889	.....11-3
81113	.....13-14	84310	.....6-12	85414	.....6-11	86706	.....6-7	86863	.....6-7	88890	.....11-3
81114	.....13-14	84311	.....6-12	85415	.....6-11	86707	.....6-7	86864	.....6-7	88894	.....11-3
81115	.....13-14	84312	.....6-12	85454	.....6-11	86708	.....6-7	86865	.....6-7	88898	.....11-3
81116	.....13-14	84313	.....6-12	85455	.....6-11	86709	.....6-7	86866	.....6-7	88899	.....11-3
81117	.....13-14	84314	.....6-12	85456	.....6-11	86710	.....6-7	86867	.....6-7	90102	.....10-1, 13-27
81118	.....13-14	84315	.....6-12	85457	.....6-11	86711	.....6-7	86900	.....6-6	90106	.....10-1, 13-27
81119	.....13-14	84354	.....6-12	85458	.....6-11	86712	.....6-7	86950	.....6-6	90108	.....13-21
81120	.....13-14	84355	.....6-12	85459	.....6-11	86713	.....6-7	87908	.....11-1	90108MT	.....13-21
81121	.....13-14	84356	.....6-12	85461	.....6-11	86714	.....6-7	87910	.....11-1	90112	.....10-1, 13-27
81122	.....13-14	84357	.....6-12	85463	.....6-11	86715	.....6-7	87912	.....11-1	90134	.....13-20
81123	.....13-14	84358	.....6-12	86180	.....6-7	86716	.....6-7	87914	.....11-1	90136	.....13-20
81124	.....13-14	84359	.....6-12	86181	.....6-7	86717	.....6-7	87916	.....11-1	90137	.....13-20
81125	.....13-14	84361	.....6-12	86182	.....6-7	86718	.....6-7	87920	.....11-1	90138	.....13-20
81126	.....13-14	84363	.....6-12	86183	.....6-7	86719	.....6-7	87924	.....11-1	90140	.....13-20
81127	.....13-14	84406	.....6-12	86184	.....6-7	86720	.....6-7	87950	.....11-3	90142	.....13-20
81128	.....13-14	84407	.....6-12	86185	.....6-7	86721	.....6-7	88015	.....6-2	90144	.....13-20
81129	.....13-14	84408	.....6-12	86186	.....6-7	86722	.....6-7	88017	.....6-2	90146	.....13-20
81130	.....13-14	84409	.....6-12	86187	.....6-7	86750	.....6-6	88022	.....6-5	90148	.....13-20
81131	.....13-14	84410	.....6-12	86188	.....6-7	86752	.....6-7	88024	.....6-5	90150	.....13-20
81132	.....13-14	84411	.....6-12	86189	.....6-7	86753	.....6-7	88025	.....6-5	90152	.....13-20
81133	.....13-14	84412	.....6-12	86190	.....6-7	86754	.....6-7	88029	.....6-5	90154	.....13-20
81134	.....13-14	84413	.....6-12	86191	.....6-7	86755	.....6-7	88030	.....6-5	90156	.....13-20
81135	.....13-14	84414	.....6-12	86192	.....6-7	86756	.....6-7	88031	.....6-5	90158	.....13-20
81136	.....13-14	84415	.....6-12	86200	.....6-6	86757	.....6-7	88033	.....6-5	90160	.....13-20
81137	.....13-14	84454	.....6-12	86203	.....6-8	86758	.....6-7	88034	.....6-5	90162	.....13-20
81138	.....13-14	84455	.....6-12	86204	.....6-8	86759	.....6-7	88035	.....6-5	90164	.....13-20
81139	.....13-14	84456	.....6-12	86205	.....6-8	86760	.....6-7	88036	.....6-5	90165	.....13-21
81140	.....13-14	84457	.....6-12	86206	.....6-8	86761	.....6-7	88038	.....6-5	90166	.....13-21
81141	.....13-14	84458	.....6-12	86207	.....6-8	86762	.....6-7	88045	.....6-2	90168	.....13-21
81142	.....13-14	84459	.....6-12	86208	.....6-8	86763	.....6-7	88051	.....6-2	90170	.....13-21
81143	.....13-14	84461	.....6-12	86209	.....6-8	86764	.....6-7	88056	.....6-2	90172	.....13-21
81144	.....13-14	84463	.....6-12	86210	.....6-8	86765	.....6-7	88057	.....6-2	90174	.....13-21
81145	.....13-14	85206	.....6-11	86211	.....6-8	86766	.....6-7	88060	.....6-5	90176	.....13-21
81146	.....13-14	85207	.....6-11	86212	.....6-8	86767	.....6-7	88061	.....6-5	90180	.....13-21
81147	.....13-14	85208	.....6-11	86213	.....6-8	86801	.....6-7	88063	.....6-5	90184	.....13-21
81148	.....13-14	85209	.....6-11	86214	.....6-8	86802	.....6-7	88064	.....6-5	90188	.....13-21
81149	.....13-14	85210	.....6-11	86215	.....6-8	86803	.....6-7	88081	.....6-2	90192	.....13-21
81150	.....13-14	85211	.....6-11	86250	.....6-6	86804	.....6-7	88091	.....6-2	90196	.....13-21
81151	.....13-14	85212	.....6-11	86253	.....6-8	86805	.....6-7	88095	.....6-2	90208	.....10-1
81152	.....13-15	85213	.....6-11	86254	.....6-8	86806	.....6-7	88185	.....6-5	90210	.....10-1
81153	.....13-15	85214	.....6-11	86255	.....6-8	86807	.....6-7	88186	.....6-5	90212	.....10-1
81154	.....13-15	85215	.....6-11	86256	.....6-8	86808	.....6-7	88601	.....11-2	90214	.....10-1
81155	.....13-15	85254	.....6-11	86257	.....6-8	86809	.....6-7	88702	.....11-2	90216	.....10-1
81156	.....13-15	85255	.....6-11	86258	.....6-8	86810	.....6-7	88706	.....11-2	90220	.....10-1
81157	.....13-15	85256	.....6-11	86259	.....6-8	86811	.....6-7	88708	.....11-2	90224	.....10-1
81158	.....13-15	85257	.....6-11	86261	.....6-8	86812	.....6-7	88710	.....11-2	90243	.....10-1
81159	.....13-15	85258	.....6-11	86263	.....6-8	86813	.....6-7	88712	.....11-2	90304	.....10-1
81160	.....13-15	85259	.....6-11	86505	.....6-7	86814	.....6-7	88714	.....11-2	90305	.....10-1
81232	.....6-10	85261	.....6-11	86506	.....6-7	86815	.....6-7	88716	.....11-2	90306	.....10-1
81239	.....6-10	85263	.....6-11	86508	.....6-7	86816	.....6-7	88804	.....11-2	90307	.....10-1
81334	.....6-10	85310	.....6-11	86510	.....6-7	86817	.....6-7	88805	.....11-2	90308	.....10-1
81338	.....6-10	85311	.....6-11	86511	.....6-7	86818	.....6-7	88806	.....11-2	90309	.....10-1
81430	.....6-10	85312	.....6-11	86512	.....6-7	86819	.....6-7	88807	.....11-2	90310	.....10-1
81432	.....6-10	85313	.....6-11	86513	.....6-7	86820	.....6-7	88808	.....11-2	90311	.....10-1
81435	.....6-10	85314	.....6-11	86605	.....6-7	86821	.....6-7	88809	.....11-2	90312	.....10-1
81437	.....6-10	85315	.....6-11	86606	.....6-7	86822	.....6-7	88810	.....11-2	90313	.....10-1

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
90314	10-1	91158	13-20	92055	17-5	92327	17-7	92555	17-9	93111	17-12
90315	10-1	91159	13-20	92063	17-5	92327PK	17-7	92563	17-9	93111PK	17-12
90316	10-1	91160	13-20	92073	17-5	92329	17-7	92565	17-9	93113	17-12
90318	10-1	91161	13-20	92075	17-5	92330	17-7	92567	17-9	93113PK	17-12
90320	10-1	91162	13-20	92077	17-5	92330PK	17-7	92569	17-9	93115	17-12
90322	10-1	91163	13-20	92079	17-5	92332	17-7	92571	17-9	93123	17-12
90324	10-1	91164	13-20	92083	17-5	92333	17-7	92573	17-9	93125	17-12
90343	10-1	91893	17-23	92083PK	17-5	92333PK	17-7	92579	17-9	93127	17-12
90344	10-1	91894	17-23	92085	17-5	92335	17-7	92581	17-9	93129	17-12
90346	10-1	91895	17-23	92085PK	17-5	92336	17-7	92583	17-9	93131	17-12
90501	10-2	91896	17-23	92087	17-5	92336PK	17-7	92585	17-9	93133	17-12
90504	10-2	91899	17-23	92087PK	17-5	92338	17-7	92587	17-9	93135	17-12
90506	10-2	91901	17-23	92105	17-6	92361	17-7	92589	17-9	93139	17-12
90508	10-2	91902	17-23	92105PK	17-6	92365	17-7	92595	17-6	93141	17-12
90510	10-2	91903	17-23	92107	17-6	92369	17-7	92597	17-6	93143	17-12
90512	10-2	91904	17-23	92107PK	17-6	92377	17-7	92600PK	17-29	93145	17-12
90514	10-2	91905	17-22	92111	17-6	92381	17-7	92601PK	17-29	93147	17-12
90516	10-2	91907	17-28	92111PK	17-6	92403	17-8	93003	17-10	93149	17-12
90531	10-3	91908	17-28	92113	17-6	92407	17-8	93003PK	17-10	93151	17-12
90532	10-3	91909	17-22	92113PK	17-6	92411	17-8	93007	17-10	93155	17-12
90533	10-3	91912	17-23	92115	17-6	92415	17-8	93007PK	17-10	93157	17-12
90537	10-3	91913	17-22	92115PK	17-6	92415PK	17-8	93011	17-10	93159	17-12
90538	10-3	91915	17-22	92117	17-6	92419	17-8	93011PK	17-10	93161	17-12
90539	10-3	91917	17-22	92119	17-6	92423	17-8	93013	17-10	93161PK	17-12
90544	10-3	91919	17-22	92135	17-6	92423PK	17-8	93017	17-10	93163	17-12
90545	10-3	91921	17-22	92139	17-6	92425	17-8	93019	17-10	93163PK	17-12
90547	10-3	91923	17-22	92141	17-6	92427	17-8	93021	17-10	93165	17-12
90548	10-3	91925	17-22	92143	17-6	92431	17-8	93023	17-10	93165PK	17-12
90549	10-3	91927	17-22	92145	17-6	92431PK	17-8	93023PK	17-10	93167	17-12
90558	10-2	91929	17-22	92147	17-6	92432	17-8	93025	17-10	93173	17-12
90560	10-2	91933	17-22	92163	17-6	92437	17-8	93025PK	17-10	93175	17-12
90562	10-2	91937	17-22	92165	17-6	92437PK	17-8	93029	17-10	93177	17-12
90566	10-2	91941	17-29	92169	17-6	92443	17-8	93029PK	17-10	93179	17-12
90576	10-3	91943	17-29	92171	17-6	92443PK	17-8	93030	17-11	93181	17-12
90577	10-3	91945	17-29	92173	17-6	92451	17-8	93031	17-11	93183	17-12
90578	10-3	91947	17-29	92175	17-6	92467	17-8	93032	17-11	93185	17-12
90579	10-3	91953	17-23	92177	17-6	92483	17-8	93033	17-11	93191	17-12
90581	10-3	91963	17-28	92201	17-6	92489	17-8	93034	17-11	93193	17-12
90582	10-3	91971	17-4	92203	17-6	92491	17-8	93035	17-11	93193PK	17-12
90583	10-3	91973	17-4	92203PK	17-6	92493	17-8	93036	17-11	93195	17-12
90584	10-3	91975	17-23	92205	17-6	92495	17-8	93037	17-11	93195PK	17-12
90585	10-3	91977	17-4	92205PK	17-6	92497	17-8	93038	17-11	93203	17-13
90590	10-2	91979	17-4	92207	17-6	92499	17-8	93039	17-11	93203PK	17-13
90591	10-2	91986	17-4	92207PK	17-6	92507	17-8	93040	17-11	93205	17-13
91133	13-20	91988	17-4	92221	17-7	92509	17-8	93041	17-11	93205PK	17-13
91134	13-20	91990	17-23	92221PK	17-7	92511	17-8	93043	17-10	93207	17-13
91135	13-20	91991	17-23	92223	17-7	92513	17-8	93047	17-10	93207PK	17-13
91136	13-20	91992	17-23	92223PK	17-7	92515	17-8	93049	17-10	93211	17-13
91137	13-20	91994	17-23	92225	17-7	92517	17-8	93053	17-10	93213	17-13
91138	13-20	91995	17-23	92225PK	17-7	92525	17-8	93057	17-10	93215	17-13
91139	13-20	91998	17-4	92227	17-7	92527	17-8	93059	17-10	93219	17-13
91140	13-20	92001	17-5	92227PK	17-7	92529	17-8	93063	17-10	93221	17-13
91141	13-20	92005	17-5	92306	17-7	92531	17-8	93067	17-10	93223	17-13
91142	13-20	92005PK	17-5	92309	17-7	92533	17-8	93069	17-10	93225	17-13
91143	13-20	92007	17-5	92309PK	17-7	92534	17-9	93073	17-11	93226	17-13
91144	13-20	92011	17-5	92312	17-7	92535	17-9	93077	17-11	93227	17-13
91145	13-20	92011BAG	17-5	92312PK	17-7	92536	17-9	93079	17-11	93230	17-13
91146	13-20	92011PK	17-5	92315	17-7	92537	17-9	93084	17-11	93231	17-13
91147	13-20	92019	17-5	92315PK	17-7	92538	17-9	93085	17-11	93232	17-13
91148	13-20	92019PK	17-5	92317	17-7	92539	17-9	93086	17-11	93235	17-13
91149	13-20	92025	17-5	92318	17-7	92540	17-9	93093	17-10	93237	17-13
91150	13-20	92027	17-5	92318PK	17-7	92541	17-9	93095	17-10	93237PK	17-13
91151	13-20	92035	17-5	92320	17-7	92543	17-9	93097	17-10	93239	17-13
91152	13-20	92039	17-5	92321	17-7	92545	17-9	93099	17-10	93239PK	17-13
91153	13-20	92045	17-5	92321PK	17-7	92547	17-9	93103	17-12	93241	17-13
91154	13-20	92047	17-5	92323	17-7	92547PK	17-9	93105	17-12	93241PK	17-13
91155	13-20	92047BAG	17-5	92324	17-7	92549	17-9	93107	17-12	93245	17-13
91156	13-20	92047PK	17-5	92324PK	17-7	92551	17-9	93109	17-12	93247	17-13
91157	13-20	92053	17-5	92326	17-7	92551PK	17-9	93109PK	17-12	93249	17-13

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
93253	17-13	93606	17-18	93691	17-16	93815	17-16	94000	17-4	94872	17-2
93255	17-13	93607	17-18	93692	17-16	93817	17-16	94003	17-4	94872PK	17-2
93257	17-13	93608	17-18	93693	17-16	93853	17-27	94005	17-4	96312	14-33
93263	17-13	93610	17-18	93695	17-16	93855	17-27	94007	17-4	96606	14-34
93265	17-13	93611	17-18	93696	17-16	93857	17-27	94009	17-4	97094	14-45
93267	17-13	93612	17-18	93697	17-16	93859	17-27	94011	17-4	97094MT	14-45
93273	17-14	93613	17-18	93701	17-21	93861	17-27	94013	17-4	97311	14-46
93275	17-14	93614	17-18	93705	17-21	93863	17-27	94111	17-4	97311MT	14-46
93277	17-14	93615	17-18	93706	17-21	93865	17-27	94112	17-4	97312	14-33
93279	17-14	93616	17-18	93708	17-21	93867	17-27	94112PK	17-4	97606	14-34
93306	17-14	93617	17-18	93711	17-17	93869	17-27	94131	17-4	98000	14-45
93309	17-14	93619	17-18	93712	17-17	93871	17-27	94132	17-4	98000MT	14-45
93312	17-14	93620	17-18	93712PK	17-17	93875	17-27	94132PK	17-4	98010	6-4
93315	17-14	93621	17-18	93714	17-17	93877	17-27	94135	17-4	98012	6-4
93318	17-14	93622	17-18	93715	17-17	93879	17-27	94136	17-4	98014	6-4
93318PK	17-14	93623	17-18	93717	17-17	93883	17-27	94151	17-4	98015	6-2
93321	17-14	93624	17-18	93718	17-17	93885	17-27	94152	17-4	98016	6-4
93321PK	17-14	93625	17-18	93718PK	17-17	93891	17-27	94152PK	17-4	98017	6-2
93324	17-14	93626	17-18	93720	17-17	93892	17-27	94171	17-4	98018	6-4
93324PK	17-14	93627	17-18	93721	17-17	93893	17-27	94172	17-4	98020	6-4
93327	17-14	93628	17-18	93722	17-17	93894	17-27	94172PK	17-4	98022	6-4
93327PK	17-14	93630	17-18	93723	17-17	93895	17-27	94201	17-3	98024	6-4
93330	17-14	93632	17-18	93724	17-17	93896	17-27	94202	17-3	98026	6-4
93330PK	17-14	93633	17-18	93727	17-17	93897	17-27	94203	17-3	98027	6-2
93333	17-14	93634	17-18	93728	17-17	93898	17-27	94204	17-3	98028	6-4
93333PK	17-14	93635	17-18	93729	17-17	93899	17-27	94205	17-3	98030	6-4
93336	17-14	93637	17-18	93730	17-17	93925	17-25	94206	17-3	98032	6-4
93403	17-14	93638	17-18	93731	17-17	93927	17-25	94211	17-3	98034	6-4
93405	17-14	93639	17-18	93732	17-17	93929	17-25	94212	17-3	98036	6-4
93407	17-14	93640	17-18	93733	17-17	93933	17-26	94215	17-3	98038	6-4
93409	17-14	93641	17-18	93734	17-17	93933PK	17-26	94216	17-3	98040	6-4
93411	17-14	93643	17-19	93736	17-17	93936	17-26	94231	17-3	98042	6-4
93413	17-14	93644	17-19	93738	17-17	93936PK	17-26	94232	17-3	98045	6-2
93415	17-14	93645	17-19	93741	17-17	93937	17-26	94251	17-3	98045CD	6-2
93419	17-14	93646	17-19	93743	17-17	93939	17-26	94252	17-3	98045CS	6-2
93423	17-14	93647	17-19	93744	17-17	93941	17-26	94271	17-3	98050	6-4
93427	17-14	93648	17-19	93751	17-20	93943	17-26	94272	17-3	98051	6-2
93461	17-15	93649	17-19	93752	17-20	93943PK	17-26	94311	17-3	98052	6-4
93463	17-15	93650	17-19	93755	17-20	93947	17-26	94312	17-3	98055	6-2
93465	17-15	93651	17-19	93756	17-20	93949	17-26	94315	17-3	98057	6-2
93467	17-15	93652	17-19	93758	17-20	93951	17-26	94316	17-3	98058	6-2
93469	17-15	93653	17-19	93761	17-20	93955	17-26	94331	17-3	98060	6-4
93471	17-15	93654	17-19	93761PK	17-20	93957	17-26	94332	17-3	98062	6-4
93473	17-15	93655	17-19	93763	17-20	93958	17-26	94335	17-3	98070	6-4
93475	17-15	93656	17-19	93765	17-20	93959	17-26	94336	17-3	98070BE	6-4
93477	17-15	93657	17-19	93771	17-20	93960	17-26	94351	17-3	98075	6-2
93479	17-15	93658	17-19	93773	17-20	93961	17-26	94352	17-3	98076	6-2
93481	17-11	93659	17-19	93775	17-20	93962	17-26	94355	17-3	98080	6-4
93483	17-11	93660	17-19	93776	17-20	93964	17-26	94356	17-3	98091	6-2
93490PK	17-29	93661	17-19	93777	17-20	93967	17-26	94371	17-3	98091CS	6-2
93491PK	17-29	93662	17-19	93779	17-20	93968	17-26	94372	17-3	98095	6-2
93492PK	17-29	93663	17-19	93781	17-20	93970	17-25	94414	17-3	98146	14-35
93503	17-15	93664	17-19	93782	17-20	93973	17-24	94416	17-3	98606	14-35
93509	17-15	93665	17-19	93783	17-20	93975	17-24	94434	17-3	98614	14-35
93515	17-15	93666	17-19	93784	17-20	93977	17-24	94436	17-3	99000	14-45
93515PK	17-15	93667	17-19	93784PK	17-20	93979	17-24	94712	17-2	99000MT	14-45
93521	17-15	93668	17-19	93786	17-20	93981	17-24	94712PK	17-2	99146	14-35
93521PK	17-15	93669	17-19	93787	17-20	93983	17-25	94732	17-2	99601	11-2
93525	17-15	93671	17-16	93789	17-20	93986	17-24	94732PK	17-2	99606	14-35
93525PK	17-15	93672	17-16	93790	17-20	93987	17-24	94752	17-2	99614	14-35
93533	17-28	93676	17-16	93792	17-20	93988	17-25	94752PK	17-2	99702	11-2
93535PK	17-13	93677	17-16	93793	17-20	93989	17-25	94772	17-2	99706	11-2
93543	17-28	93678	17-16	93795	17-20	93991	17-24	94772PK	17-2	99708	11-2
93545	17-28	93683	17-16	93797	17-20	93991PK	17-24	94812	17-2	99710	11-2
93550	17-28	93684	17-16	93799	17-20	93993	17-25	94812PK	17-2	99712	11-2
93601	17-18	93685	17-16	93811	17-16	93994	17-25	94832	17-2	99714	11-2
93602	17-18	93686	17-16	93811PK	17-16	93995	17-24	94832PK	17-2	99716	11-2
93603	17-18	93688	17-16	93813	17-16	93997	17-25	94852	17-2	99904	11-2
93604	17-18	93690	17-16	93813PK	17-16	93998	17-25	94852PK	17-2	99905	11-2

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
99906	.....11-2	310436	.....14-11	333315	.....14-13	410010	.....14-9	420311	.....12-14	502019	.....14-21
99907	.....11-2	310438	.....14-11	333318	.....14-13	410012	.....14-9	420312	.....12-14	502021	.....14-21
99908	.....11-2	310439	.....14-11	333320	.....14-13	410015	.....14-9	420313	.....12-14	502022	.....14-21
99909	.....11-2	310440	.....14-11	333321	.....14-13	410016	.....14-9	420314	.....12-14	502024	.....14-21
99910	.....11-2	310441	.....14-11	333322	.....14-13	410018	.....14-9	420400	.....12-6	502025	.....14-21
99911	.....11-2	310442	.....14-11	333323	.....14-13	410019	.....14-9	420401	.....12-6	502038	.....14-21
99912	.....11-2	310443	.....14-11	333325	.....14-13	410020	.....14-9	420402	.....12-6	502039	.....14-21
99913	.....11-2	310444	.....14-11	333326	.....14-13	410021	.....14-9	420500	.....12-13	502041	.....14-21
99914	.....11-2	311088	.....14-28	333327	.....14-13	410022	.....14-9	420501	.....12-13	502042	.....14-21
99915	.....11-2	313310	.....14-11	333328	.....14-13	410023	.....14-9	420502	.....12-13	502044	.....14-21
99916	.....11-2	313312	.....14-11	333331	.....14-13	410024	.....14-9	420503	.....12-13	502045	.....14-21
99918	.....11-2	313315	.....14-11	333332	.....14-13	410025	.....14-9	420504	.....12-13	502046	.....14-21
99920	.....11-2	313316	.....14-11	359001	.....14-12	410026	.....14-9	420600	.....12-2	502047	.....14-21
99922	.....11-2	313318	.....14-11	359002	.....14-12	410027	.....14-9	420601	.....12-2	502048	.....14-21
99924	.....11-2	313319	.....14-11	359003	.....14-12	410028	.....14-9	420602	.....12-2	502049	.....14-21
300315	.....14-10	313320	.....14-11	359004	.....14-12	410029	.....14-9	420700	.....12-10	502101	.....14-21
300319	.....14-10	313321	.....14-11	359005	.....14-12	413010	.....14-9	420701	.....12-10	503038	.....14-21
300322	.....14-10	313322	.....14-11	359006	.....14-12	413012	.....14-9	420702	.....12-12	503039	.....14-21
300323	.....14-10	313323	.....14-11	359010	.....14-12	413015	.....14-9	420703	.....12-12	503041	.....14-21
300325	.....14-10	313325	.....14-11	400007	.....14-8	413016	.....14-9	420800	.....12-16	503042	.....14-21
300326	.....14-10	313326	.....14-11	400009	.....14-8	413018	.....14-9	420801	.....12-16	503044	.....14-21
303101	.....14-10	313327	.....14-11	400010	.....14-8	413019	.....14-9	420900	.....12-7	503045	.....14-21
303102	.....14-10	313328	.....14-11	400012	.....14-8	413020	.....14-9	421000	.....12-4	503046	.....14-21
303103	.....14-10	313331	.....14-11	400013	.....14-8	413021	.....14-9	421001	.....12-4	503047	.....14-21
303205	.....14-10	313332	.....14-11	400014	.....14-8	413022	.....14-9	421002	.....12-4	503048	.....14-21
303206	.....14-10	313433	.....14-11	400015	.....14-8	413023	.....14-9	421300	.....12-12	503049	.....14-21
303209	.....14-10	313434	.....14-11	400016	.....14-8	413024	.....14-9	421301	.....12-12	503051	.....14-21
303212	.....14-10	313435	.....14-11	400017	.....14-8	413025	.....14-9	421400	.....12-7	503052	.....14-21
303213	.....14-10	313436	.....14-11	400019	.....14-8	413026	.....14-9	421401	.....12-7	503053	.....14-21
303214	.....14-10	313437	.....14-11	400020	.....14-8	413027	.....14-9	421402	.....12-7	503054	.....14-21
303216	.....14-10	313438	.....14-11	400021	.....14-8	413028	.....14-9	421600	.....12-14	503057	.....14-21
303220	.....14-10	313439	.....14-11	400022	.....14-8	413029	.....14-9	421601	.....12-14	503058	.....14-21
303315	.....14-10	313440	.....14-11	400023	.....14-8	416010	.....14-9	421700	.....12-17	503101	.....14-21
303319	.....14-10	313441	.....14-11	400025	.....14-8	416012	.....14-9	421701	.....12-17	503102	.....14-21
303322	.....14-10	313445	.....14-11	400026	.....14-8	416015	.....14-9	421702	.....12-17	504053	.....14-21
303323	.....14-10	316310	.....14-11	400028	.....14-8	416016	.....14-9	421703	.....12-17	504054	.....14-21
303325	.....14-10	316312	.....14-11	403007	.....14-8	416018	.....14-9	421900	.....12-3	504057	.....14-21
303326	.....14-10	316315	.....14-11	403008	.....14-8	416019	.....14-9	430300	.....12-15	504058	.....14-21
306101	.....14-10	316316	.....14-11	403009	.....14-8	416020	.....14-9	431000	.....12-4	504059	.....14-21
306103	.....14-10	316318	.....14-11	403010	.....14-8	416021	.....14-9	441000	.....12-4	504060	.....14-21
306205	.....14-10	316319	.....14-11	403012	.....14-8	416022	.....14-9	459001	.....14-9	504061	.....14-21
306209	.....14-10	316320	.....14-11	403013	.....14-8	416023	.....14-9	459002	.....14-9	504062	.....14-21
306213	.....14-10	316321	.....14-11	403014	.....14-8	416024	.....14-9	459003	.....14-9	504063	.....14-21
306216	.....14-10	316322	.....14-11	403015	.....14-8	416025	.....14-9	459004	.....14-9	520100	.....12-5
306319	.....14-10	316323	.....14-11	403016	.....14-8	416026	.....14-9	459005	.....14-9	520101	.....12-5
306322	.....14-10	316325	.....14-11	403017	.....14-8	416027	.....14-9	459006	.....14-9	520102	.....12-5
306323	.....14-10	316326	.....14-11	403019	.....14-8	416028	.....14-9	459007	.....14-9	520103	.....12-5
306325	.....14-10	316327	.....14-11	403020	.....14-8	416029	.....14-9	459008	.....14-9	520200	.....12-4
306326	.....14-10	316328	.....14-11	403021	.....14-8	420100	.....12-5	459009	.....14-9	520201	.....12-4
310310	.....14-11	316331	.....14-11	403022	.....14-8	420101	.....12-5	501009	.....14-21	520202	.....12-4
310312	.....14-11	316332	.....14-11	403023	.....14-8	420102	.....12-5	501010	.....14-21	520203	.....12-4
310315	.....14-11	316433	.....14-11	403025	.....14-8	420103	.....12-5	501012	.....14-21	520204	.....12-4
310316	.....14-11	316434	.....14-11	403026	.....14-8	420200	.....12-5	501013	.....14-21	520300	.....12-15
310318	.....14-11	316435	.....14-11	403028	.....14-8	420201	.....12-5	501014	.....14-21	520301	.....12-15
310319	.....14-11	316436	.....14-11	406007	.....14-8	420202	.....12-5	501015	.....14-21	520302	.....12-15
310320	.....14-11	316437	.....14-11	406009	.....14-8	420203	.....12-5	501018	.....14-21	520303	.....12-15
310321	.....14-11	316438	.....14-11	406010	.....14-8	420204	.....12-5	501019	.....14-21	520304	.....12-15
310322	.....14-11	316439	.....14-11	406012	.....14-8	420205	.....12-5	501021	.....14-21	520305	.....12-15
310323	.....14-11	316440	.....14-11	406015	.....14-8	420300	.....12-15	501022	.....14-21	520306	.....12-15
310325	.....14-11	316441	.....14-11	406016	.....14-8	420301	.....12-15	501024	.....14-21	520307	.....12-15
310326	.....14-11	316444	.....14-11	406017	.....14-8	420302	.....12-15	501025	.....14-21	520308	.....12-15
310327	.....14-11	323315	.....14-13	406019	.....14-8	420303	.....12-15	501038	.....14-21	520309	.....12-15
310328	.....14-11	323319	.....14-13	406020	.....14-8	420304	.....12-15	501039	.....14-21	520310	.....12-15
310331	.....14-11	323322	.....14-13	406021	.....14-8	420305	.....12-15	501041	.....14-21	520311	.....12-15
310332	.....14-11	323323	.....14-13	406022	.....14-8	420306	.....12-15	501042	.....14-21	520312	.....12-14
310340	.....14-30	323325	.....14-13	406023	.....14-8	420307	.....12-15	502009	.....14-21	520313	.....12-14
310433	.....14-11	323328	.....14-13	406025	.....14-8	420308	.....12-15	502014	.....14-21	520314	.....12-14
310434	.....14-11	333310	.....14-13	406026	.....14-8	420309	.....12-14	502015	.....14-21	520315	.....12-14
310435	.....14-11	333312	.....14-13	406028	.....14-8	420310	.....12-14	502018	.....14-21	520316	.....12-14

# NUMERICAL INDEX

STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE	STOCK #	PAGE
520317	.....12-14	530302	.....12-15	BC924F	.....3-25	M313/-3/8	.....4-2	RPCV130	.....3-11		
520318	.....12-14	530303	.....12-15	BC924H	.....3-25	M313/-5/8	.....4-2	RPR400-5	.....3-33		
520400	.....12-6	530304	.....12-15	C129	.....3-16	M313/S4	.....4-2	RPR400S	.....3-33		
520401	.....12-6	530305	.....12-15	DI 1-3/4	.....3-22	M333/1	.....4-3	RPR400U	.....3-33		
520402	.....12-6	530306	.....12-15	DI 2	.....3-22	M333/-1/2	.....4-3	RPT600	.....3-33		
520500	.....12-13	530307	.....12-15	DI 2-3/8	.....3-22	M333/-1/4	.....4-3	SI1-3/4	.....3-22		
520501	.....12-13	530308	.....12-14	DMD/PV3	.....3-7	M333/-3/4	.....4-3	SI2	.....3-22		
520502	.....12-13	530309	.....12-14	DMD/PV4	.....3-7	M333/-3/8	.....4-3	SI2-3/8	.....3-22		
520503	.....12-13	530400	.....12-6	EV150	.....3-7	M333/-5/8	.....4-3	SI2-5/8	.....3-22		
520504	.....12-13	530401	.....12-6	EV200	.....3-7	M333/S4	.....4-3	SP4	.....3-20		
520505	.....12-13	530500	.....12-13	FG3	.....3-8	M373/1	.....4-1	SP5	.....3-20		
520506	.....12-13	530501	.....12-13	FG4	.....3-8	M373/-1/2	.....4-1	TS10	.....3-32		
520507	.....12-13	530502	.....12-13	FG4-1/2	.....3-8	M373/-1/4	.....4-1	UB3020-533	.....8-5		
520508	.....12-13	530503	.....12-13	FG4-1/4	.....3-8	M373/-1/8	.....4-1	V75B	.....3-4		
520600	.....12-2	530504	.....12-13	FG5	.....3-8	M373/1-1/2	.....4-1	V149B	.....3-10		
520601	.....12-1	530505	.....12-13	FG5-1/4	.....3-8	M373/1-1/4	.....4-1	V150B	.....3-10		
520602	.....12-1	530506	.....12-13	FG6	.....3-8	M373/2	.....4-1	V175B	.....3-10		
520603	.....12-2	530507	.....12-13	H914	.....3-26	M373/-3/4	.....4-1	XP201-350	.....8-2		
520604	.....12-1	530508	.....12-13	H914F	.....3-26	M373/-3/8	.....4-1	XP201-500	.....8-2		
520605	.....12-2	530600	.....12-1	H918F	.....3-26	M373/-5/8	.....4-1	XP201-650	.....8-2		
520606	.....12-1	530601	.....12-2	H918H	.....3-26	M373/LR11	.....4-1	XP2047-300	.....8-2		
520700	.....12-10	530602	.....12-1	H924E	.....3-26	M373/R11	.....4-1	XP2049-325	.....8-2		
520701	.....12-12	530603	.....12-2	H924F	.....3-26	M373/S4	.....4-1	XP2055-300	.....8-2		
520702	.....12-10	530700	.....12-10	H924H	.....3-26	M373/S5	.....4-1	XP216-375	.....8-2		
520703	.....12-12	530701	.....12-12	H930F	.....3-26	M373/SB6	.....4-1				
520704	.....12-10	530800	.....12-16	H930H	.....3-26	M377/1	.....4-3				
520705	.....12-12	531000	.....12-4	H936F	.....3-26	M377/-1/2	.....4-3				
520800	.....12-16	531001	.....12-10	H936H	.....3-26	M377/-1/4	.....4-3				
520801	.....12-16	531100	.....12-8	H942F	.....3-26	M377/-1/8	.....4-3				
520900	.....12-7	531101	.....12-8	H942H	.....3-26	M377/1-1/2	.....4-3				
521000	.....12-11	531102	.....12-8	J914	.....3-26	M377/1-1/4	.....4-3				
521001	.....12-4	531103	.....12-8	J914F	.....3-26	M377/2	.....4-3				
521002	.....12-4	531104	.....12-8	J918F	.....3-26	M377/-3/4	.....4-3				
521003	.....12-4	531300	.....12-11	J918H	.....3-26	M377/-3/8	.....4-3				
521100	.....12-7	531800	.....12-3	J924E	.....3-26	M377/-5/8	.....4-3				
521101	.....12-8	531900	.....12-3	J924F	.....3-26	M380/1	.....4-4				
521102	.....12-8	531901	.....12-3	J924H	.....3-26	M380/-1/2	.....4-4				
521103	.....12-8	532300	.....12-9	J930F	.....3-26	M380/-1/4	.....4-4				
521104	.....12-8	532301	.....12-6	J930H	.....3-26	M380/-1/8	.....4-4				
521105	.....12-9	541614	.....14-53	J936F	.....3-26	M380/1-1/2	.....4-4				
521106	.....12-8	543715	.....14-52	J936H	.....3-26	M380/1-1/4	.....4-4				
521107	.....12-8	552101	.....12-17	J942F	.....3-26	M380/-3/4	.....4-4				
521108	.....12-9	552102	.....12-17	J942H	.....3-26	M380/-3/8	.....4-4				
521109	.....12-9	552103	.....12-17	L135/4	.....3-16	M380/-5/8	.....4-4				
521110	.....12-8	552104	.....12-17	L136/6	.....3-17	M380/-7/8	.....4-4				
521111	.....12-8	552105	.....12-17	M130	.....3-18	M444/1	.....4-2				
521200	.....12-2	552106	.....12-17	M140	.....3-18	M444/-1/2	.....4-2				
521201	.....12-8	552107	.....12-17	M141	.....3-18	M444/-1/4	.....4-2				
521300	.....12-11	552200	.....12-16	M145	.....3-12	M444/-1/8	.....4-2				
521400	.....12-6	552201	.....12-16	M146	.....3-12	M444/1-1/2	.....4-2				
521401	.....12-6	552202	.....12-16	M204	.....4-4	M444/1-1/4	.....4-2				
521500	.....12-3	553515	.....14-53	M2050	.....4-5	M444/2	.....4-2				
521501	.....12-3	581062	.....2-5	M2083	.....4-5	M444/-3/4	.....4-2				
521502	.....12-3	31103502	.....14-27	M2153	.....4-5	M444/-3/8	.....4-2				
521503	.....12-3	31108803	.....14-28	M2154	.....4-5	M444/-5/8	.....4-2				
521800	.....12-11	31108804	.....14-28	M2200/12	.....4-5	M444/S3	.....4-2				
521802	.....12-11	31108805	.....14-28	M2200/6	.....4-5	M444/S4	.....4-2				
521900	.....12-3	31109804	.....14-28	M2200/9	.....4-5	M444/S5	.....4-2				
522000	.....12-8	31109805	.....14-28	M2226/10-1/2	.....4-5	M444/SB6	.....4-2				
522300	.....12-17	A151	.....3-22	M2450	.....4-5	MC145	.....3-12				
530062	.....2-3	A151-B	.....3-22	M2451	.....4-5	MC146	.....3-12				
530100	.....12-5	A151R	.....3-22	M2452	.....4-5	MR2049	.....4-5				
530101	.....12-5	BC914	.....3-24	M2453	.....4-5	MR2208/6	.....4-5				
530102	.....12-5	BC914F	.....3-25	M2454/S4	.....4-5	MR2208/9	.....4-5				
530200	.....12-4	BC918	.....3-24	M313/1	.....4-2	MR2210	.....4-5				
530201	.....12-4	BC918F	.....3-25	M313/-1/2	.....4-2	MR2226/9	.....4-5				
530202	.....12-4	BC918H	.....3-25	M313/-1/4	.....4-2	MR6807	.....3-18				
530300	.....12-11	BC924	.....3-24	M313/1-1/4	.....4-2	MR7715	.....4-4				
530301	.....12-15	BC924E	.....3-26	M313/-3/4	.....4-2	RPB600	.....3-33				



# PRODUCT INDEX

## A

Abrasive Wheels	
Masonry Cutting Abrasive Wheels	9-21
Masonry Depressed and Raised Center Cutting Wheels	9-21
Metal Cutting Abrasive Wheels	9-21
Metal Depressed and Raised Center Cutting Wheels	9-21
Adjustable Bits	
Lockhead Adjustable Wood Bits	11-13
MICRO-DIAL® Adjustable Wood Bits	11-13
Auger Bits	11-4 • 11-12
Auger Bit Extensions	11-6
Boring Machine Auger Bits	11-7
Electrician's Auger Bits	11-10; 11-12
Hand Brace Auger Bits	11-8 • 11-10
I-100™ Auger Bits	11-4; 11-11
Impact Wrench Auger Bits	11-11 • 11-12
Power Drill Auger Bits	11-4 • 11-6
Aviation Snips	5-1 • 5-2

## B

Ball End Hex Keys	6-8; 6-11
Bar Clamps	1-6; 2-1 • 2-7; 3-16
Hold Down Bar Clamp	2-4
Locking Bar Clamp	1-6
Macro Bar Clamp / Spreader	2-3
Micro Bar Clamp / Spreader	2-3
Mini Bar Clamps	2-2
Welding Bar Clamps	2-3
Barrier Tape	7-4
BLUE DIAMOND™ Router Bits	12-1 • 12-17
Bolt Cutters	3-24 • 3-26
Bow Saw Replacement Blades	8-5
Bow Saws	8-5
Brad Point Drill Bits	11-16
Bushings	9-14

## C

C-Clamps	1-5; 3-14 • 3-15
Carbide Hole Cutters	15-5
Carpenter Pencils	7-5
Chain Clamp, Locking	1-7
Chalk	7-2 • 7-3
Chalk Reels	7-1; 7-3
Fast Retrieve Chalk Reels	7-1
Mini Chalk Reels	7-1
Replacement Line, Chalk Reels	7-3
CHESCO™ Hex Tools	6-1 • 6-12
China Markers	7-4

Chisels	4-1 • 4-5
Chuck Adapters	10-1; 13-27; 17-21
Chuck Keys	18-5
Circular Saw Blades	9-1 • 9-14
Clamp, Handy	2-7
Clamping Tool Accessories	2-5
Clamps, Bar	2-1 • 2-7; 3-16
Clamps, Locking	1-5 • 1-6
Clamps, Locking Welding	1-6
Clamps, Spring	2-4
Combi-Saw	8-4
Coping Saw	8-4
Countersinks	10-3; 13-27
Crayon Holders, Marking	7-4
Crayons, Marking	7-4
Cutting Wheels, Masonry	9-21
Cutting Wheels, Metal	9-21

## D

DADO Sets	9-14
Die Stock, Threading Tools	14-27
Dies	14-15 • 14-25
High Carbon Steel Dies	14-16 • 14-20; 14-22 • 14-25
High Carbon Steel	
Hexagon Dies	14-16 • 14-17; 14-22 • 14-25
Machine Screw and Fractional Dies	14-16
Metric Dies	14-17
Pipe Dies	14-17
Rethreading Hexagon Dies	14-22 • 14-25
High Carbon Steel Round Dies	14-18 • 14-20
Fractional Dies	14-18
Fractional Dies, Screw Adjusting	14-19
Machine Screw Dies	14-18
Pipe Dies	14-20
High Speed Steel Round Dies	14-21
Machine Screw Fractional – Pipe Dies	14-21
Dies and Taps, Sets	14-26; 14-31 • 14-53
Door Lock Installation Kit	9-20
Dovetail Saw	8-4
Drill Bit Specifications	13-28 • 13-29
Drill Bits	10-2; 13-1 • 13-29
Aircraft Drill Bits	13-22
Chuck Adapter	10-1; 13-27
Cobalt Drill Bits	13-12
Countersinks	10-3; 13-27
Double End Drill Bits	13-23 • 13-24
Hex Shank Drill Bits	13-26
High Speed Steel Drill Bits	13-4 • 13-7
High Speed Steel, Economy Drill Bits	13-2 • 13-3
High Speed Steel, Heavy Duty Drill Bits	13-8 • 13-9
High Speed Steel, Metric Drill Bits	13-17 • 13-18
High Speed Steel, Screw Machine Fractional	13-18

# PRODUCT INDEX

High Speed Steel, TURBOMAX®	
Drill Bits	13-10 • 13-11
High Speed Steel,	
Wire Gauge Drill Bits	13-14 • 13-15; 13-19 • 13-20
Left Hand Drill Bits	13-24 • 13-25
Letter Size Drill Bits	13-16
Metal Drill Stands	13-26
Plastic and Laminate Drill Bits	13-23
Silver and Deming Drill Bits	13-20 • 13-21
Steel Drill Gauges	13-26
Titanium Nitride Drill Bits	13-13
Drill Bits, Masonry	16-1 • 16-6
Drill Bits, Step	10-2; 15-1 • 15-4
DRILLMINDER™ Bit Dispenser	13-5
DRILLMINDER PLUS™ Bit Dispenser	13-5

## E

Electrician's Auger Bits	11-10; 11-12
--------------------------	--------------

## F

FACE-OFF™ Surface Preparation Disks	18-1 • 18-2
Fastener Drive Tools	17-1 • 17-29
FIBERCUT™ Circular Saw Blades	9-10 • 9-11
Flagging Tape	7-3
Flat Bits	10-1; 11-1 • 11-3
Forstner Bits	11-15

## G

Glass and Tile Masonry Bits	16-3
Tile Cutters	16-7
Tile Pliers	16-7
Grinding Points	18-4

## H

Hack Saw, Combi-Saw	8-4
Hand Brace Auger Bits	11-8 • 11-10
Hand Brace Installer Bits	11-17
Hand Saws	8-1 • 8-5
Bow Saw Replacement Blades	8-5
Bow Saws	8-5
Combi-Saw	8-4
Combi Saw Replacement Blade	8-4
Coping Saw	8-4
Dovetail Saw	8-4
Hard Wood Handle Hand Saw	8-1
Plastic Handle Hand Saw	8-3
Pruning Saws	8-5
Drywall Saw	8-4

HANSON® Abrasive Wheels	9-21
HANSON Drill Bits	13-1 • 13-29
HANSON Fastener Drive Tools	17-1 • 17-29
HANSON Masonry Drill Bits	16-1 • 16-3
HANSON Screw Extractors	14-54 • 14-58
HANSON Screwdriver Bits	17-5 • 17-15
HANSON Taps and Dies	14-1 • 14-59
Hex Keys	6-1 • 6-15
Ball-End Hex Keys	6-8; 6-11
L-Keys	6-3 • 6-8
Long Arm Hex Keys	6-7 • 6-8
Metal Fold-Up Sets	6-1 • 6-2
Resin Fold-Up Sets	6-1 • 6-2
Short Arm Hex Keys	6-7
T-Handles	6-9 • 6-12
Hold Down Clamp, Bar Clamp	2-4
Hold Down Clamp, Locking	1-6
Hole Cutters, Carbide	15-5
Hole Saw Blades	9-19 • 9-20
HORSEPOWER® Handy Clamp / Spreader	2-7

## I

I-100™ Auger Bits	11-4; 11-11
Impact Wrench Auger Bits	11-11 • 11-12
Installer Bits	11-17 • 11-19
Hand Brace Installer Bits	11-17
Masonry Installer Bits	11-19
Power Drill Installer Bits	11-18
IRWIN® Auger Bits	11-4 • 11-12
IRWIN Hole Saw Blades	9-19 • 9-20
IRWIN Installer Bits	11-17 • 11-19
IRWIN Jig Saw Blades	9-15 • 9-16
IRWIN Premium Circular Saw Blades	9-3 • 9-4
IRWIN Pro Circular Saw Blades	9-5 • 9-6
IRWIN Reciprocating Saw Blades	9-17 • 9-18
IRWIN Steel Circular Saw Blades	9-12 • 9-14

## J

JACK® Hand Saws	8-1 • 8-5
JACKPLUS® Hand Saws	8-3
JACKPRO® Hand Saws	8-1
Jig Saw Blades	9-15 • 9-16

## L

L-Keys	6-3 • 6-8
Lockhead Adjustable Wood Bits	11-13
Locking Bar Clamp	1-6
Locking Clamps	1-5 • 1-6
Locking Pliers	1-1 • 1-3

# PRODUCT INDEX

Bent Nose Locking Pliers .....	1-3
Curved Jaw Locking Pliers .....	1-2
Large Jaw Locking Pliers .....	1-3
Long Nose Locking Pliers .....	1-3
Straight Jaw Locking Pliers .....	1-3
Locking Specialty Tools .....	1-6 • 1-7
Locking Chain Clamp .....	1-7
Locking Panel Clamp .....	1-7
Locking Pinch-Off Tool .....	1-7
Locking Sheet Metal Tool .....	1-7
Locking Welding Clamp .....	1-6
Locking Tool Replacement Parts .....	1-9
Locking Tool Sets .....	1-8
Locking Wrenches .....	1-4
LOCK-N-LOAD™ Quick Change Tools .....	10-1 • 10-3
Drill Bits .....	10-2
Fastener Drive Tools .....	10-3
Multi Purpose Drill Bits .....	10-2
Plug Cutter .....	10-3
Woodboring Bits .....	10-1
Long Ship Auger Bits .....	11-5; 11-8; 11-11
Loop Grip T-Handle, Hex Keys .....	6-12

## M

Machine Auger Bits .....	11-7
Macro Bar Clamp / Spreader .....	2-3
MARATHON® Circular Saw Blades .....	9-1 • 9-2
Markers, China .....	7-4
Marking Crayon Holders .....	7-4
Marking Crayons .....	7-4
Marking Tools .....	7-1 • 7-5
MARPLES® Chisels .....	4-1 • 4-5
Masonry Installer Bits .....	11-19
Masonry Drill Bits .....	16-1 • 16-6
Glass and Tile Masonry Drill Bits .....	16-3
Multi-Material Drill Bits .....	16-4
Rotary Percussion	
Masonry Drill Bits .....	16-1 • 16-2; 16-5
Metal Fold-Up Sets, Hex Keys .....	6-1 • 6-2
Micro Bar Clamp / Spreader .....	2-3
MICRO-DIAL® Adjustable Wood Bits .....	11-13
Mini Bar Clamps .....	2-2

## N

Nutsetters .....	10-3; 17-2 • 17-4
------------------	-------------------

## O

Offset Snips .....	5-4
--------------------	-----

## P

Panel Clamp, Locking .....	1-7
Pencils, Carpenter .....	7-5
Pinch-Off Tool, Locking .....	1-7
Pipe Clamp / Spreader .....	2-6
Pipe Tools .....	3-28 • 3-32
Planes .....	3-20 • 3-22
Pliers, Locking .....	1-1 • 1-3
Plug Cutters .....	10-3; 11-16
Plumb Bobs .....	7-5
Power Drill Auger Bits .....	11-4 • 11-6
Power Drill Installer Bits .....	11-18
Power Pole Auger Bits .....	11-6
POWERPRESS® Pipe Clamp / Spreader .....	2-6
PROSNIP® Snips .....	5-1 • 5-5
Pruning Saws .....	8-5
PULVERIZER™ Masonry Drill Bits .....	16-5

## Q

QUICK-GRIP® Clamping Tools .....	2-2 • 2-5
QUICK CHANGE™ Clamping Tools .....	2-1

## R

Railroad Tie Machine Auger Bits .....	11-7
Ratchet, Tap - Tap Wrench .....	14-29
Reamer Wrenches .....	14-28 • 14-30
RECORD® Hand Tools .....	3-1 • 3-33
Bolt Cutters .....	3-24 • 3-26
Clamps .....	3-14 • 3-18
Planes .....	3-20 • 3-22
Pipe Tools .....	3-28 • 3-32
Vises .....	3-3 • 3-7; 3-10 • 3-12
Reciprocating Saw Blades .....	9-17 • 9-18
Reels, Chalk .....	7-1; 7-3
Resin Fold-Up Sets, Hex Keys .....	6-1 • 6-2
Router Bits .....	12-1 • 12-17
Accessories, Router Bits .....	12-17
Carbide Tipped Router Bits .....	12-1 • 12-16
High Speed Steel	
Router Bits .....	12-2 • 12-7; 12-10; 12-12 • 12-17

## S

Saber Saw Blades .....	9-15 • 9-16
Sanding Discs .....	18-1 • 18-3
Sanding Drums .....	18-3
Saw Blades, Circular .....	9-1 • 9-14
Saws, Hand .....	8-1 • 8-5
Screw Extractors .....	14-54 • 14-58

# PRODUCT INDEX

Combo Sets, Screw Extractors and Drill Bits .....	14-57 • 14-58
Hex Head Multi-Spline Screw Extractors .....	14-56
Spiral Flute Screw Extractors .....	14-55
Straight Flute Screw Extractors .....	14-55 • 14-56
Screwdriver Bits .....	17-5 • 17-15
Self-Feed Wood Bits .....	11-14
Sheet Metal Tool, Locking .....	1-7
Short Ship Auger Bits .....	11-5
Snips .....	5-1 • 5-5
Aviation Snips .....	5-1 • 5-2
Offset Snips .....	5-4
Tinner Snips .....	5-5
Utility Snips .....	5-3
Soapstone .....	7-5
Solid-Center Auger Bits .....	11-9 • 11-10
Spade Bits .....	10-1; 11-1 • 11-3
SPEEDBOR® Wood Boring Bits .....	11-1 • 11-3
SPEED-LINE® Chalk Reels .....	7-1
Spreader .....	2-6
Spreader, Micro Bar Clamp .....	2-3
Spreader, Macro Bar Clamp .....	2-3
Spreader, Pipe Clamp .....	2-6
Spring Clamps .....	2-4
SPRINT® Circular Saw Blades .....	9-7 • 9-9
Step Drills .....	10-2; 15-1 • 15-4
Stop Collars .....	15-4
STRAIT-LINE® Chalk and Reels .....	7-1 • 7-3
Sugar Tree Tapping Auger Bit .....	11-10

## T

T-Handle Wrenches, Threading Tools .....	14-29
T-Handles, Hex Keys .....	6-9 • 6-12
Tape, Barrier .....	7-4
Tape, Flagging .....	7-3
Taps .....	14-1 • 14-14
Fractional Plug Taps .....	14-14
High Carbon Steel Taps .....	14-2 • 14-7
Drill and Tap Sets .....	14-6 • 14-7
Fractional Taps .....	14-3
Machine Screw Taps .....	14-2
Metric Thread Taps .....	14-4
Pipe Taps NPT and BSP .....	14-5
Spark Plug Taps .....	14-5 • 14-6
High Speed Steel Cut Thread Taps .....	14-8 • 14-10
Fractional Taps .....	14-9

Machine Screw Taps .....	14-8
NPT Taper Pipe .....	14-9
High Speed Steel Ground Thread Taps .....	14-10 • 14-13
Fractional Taps .....	14-11
Machine Screw Taps .....	14-13
Pipe Taps Taper .....	14-12
Spiral Point Chip Driver Fractional Screw Taps .....	14-13
Spiral Point Chip Driver Machine Screw Taps .....	14-13
High Speed Steel Left Hand .....	14-12
High Speed Steel Plug Type Taps .....	14-14
Taps and Dies, Sets .....	14-26; 14-31 • 14-53
Tinner Snips .....	5-5
Threading Tools .....	14-27 • 14-30
Adjustable Guide Die Stocks .....	14-27
Plain Die Stock Threading Tools .....	14-27
Reamers .....	14-30
T-Handle Wrenches .....	14-29
Tap and Reamer Wrenches .....	14-28
Tap Wrenches .....	14-28 • 14-29
Thread Gauges .....	14-30
Tile Cutter .....	16-7
Tile Pliers .....	16-7
TURBOMAX® Drill Bits .....	13-10 • 13-11

## U

UNIBIT® Carbide Hole Cutters .....	15-5
UNIBIT Step Drills .....	10-2; 15-1 • 15-4
UNI-PLUS® Multi-Material Drill Bits .....	16-4
Utility Pole Auger Bits .....	11-8; 11-11
Utility Snips .....	5-3

## V

Vinyl Grip T-Handle, Hex Keys .....	6-9 • 6-11
Vises .....	3-3 • 3-7; 3-10 • 3-12
VISE-GRIP® Locking Tools .....	1-1 • 1-9

## W

Welding Clamp, Bar .....	2-3
Welding Clamp, Locking .....	1-6
Wire Brushes .....	18-3
Wrenches, Locking .....	1-4

# NOTES





# NOTES



**Customer Service**

**Phone: 1-800-866-5740**

**Fax: 1-800-866-5742**

**[www.american tool.com](http://www.american tool.com)**

**American Tool Companies, Inc.  
92 Grant Street, PO Box 829  
Wilmington, OH 45177**